

TOSHIBA

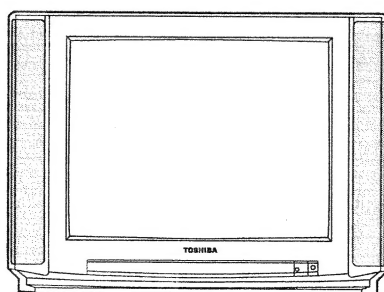
SERVICE MANUAL

COLOUR TELEVISION

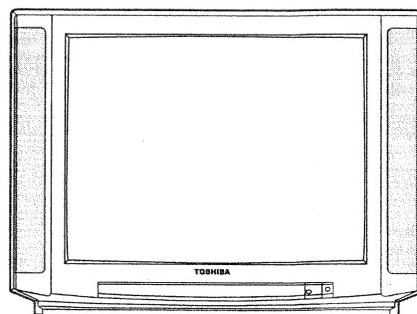
C6SR Chassis

2563DN, 2863DN

2563DN



2863DN



SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. The E.H.T. must be checked every time the receiver is serviced to ensure that the C.R.T. does not emit X-ray radiation as result of excessive E.H.T. voltage. The nominal E.H.T. for this receiver is 27.7 kV at zero beam current (minimum brightness) operating at 220V a.c. The maximum E.H.T. voltage permissible in any operating circumstances must not exceed 29.9 kV. When checking the E.H.T., use the 'High Voltage Check' procedure in this manual using an accurate E.H.T. voltmeter.
2. The only source of X-RAY radiation in this receiver is the C.R.T. To prevent X-ray radiation, the replacement C.R.T. must be identical to the original fitted as specified in the Parts List.
3. Some components used in this receiver have safety related characteristics preventing the C.R.T. from emitting X-ray radiation.
For continued safety, replacement component should only be made after referring the Product Safety Notice below.

SAFETY PRECAUTION

1. This receiver has a nominal working E.H.T. voltage of 26.0 kV. Extreme caution should be exercised when working on the receiver with the back removed.
Do not attempt to service this receiver if you are not conversant with the precautions and procedures for working on high voltage equipment.
When handling or working on the C.R.T., always discharge the anode to the receiver chassis before removing the anode cap.
The C.R.T., if broken, will violently expel glass fragments. Use shatter proof goggles and take extreme care while handling.
Do not hold the C.R.T. by the neck as this is a very dangerous practice.
2. It is essential that to maintain the safety of the customer all cable forms be replaced exactly as supplied from factory.
3. A small part of the chassis used in this receiver is, when operating, at approximately half mains potential at all times. It is therefore essential in the interest of safety that when serving or connecting any test equipment the receiver should be supplied via a suitable isolating transformer of adequate rating.
4. Replace blown fuses within the receiver with the fuse specified in the parts list.
5. When replacing wires or components to terminals or tags, wind the leads around the terminal before soldering. When replacing safety components identified by the international hazard symbols on the circuit diagram and parts list, it must be a Toshiba approved type and must be mounted as the original.
6. Keep wires away from high temperature components.

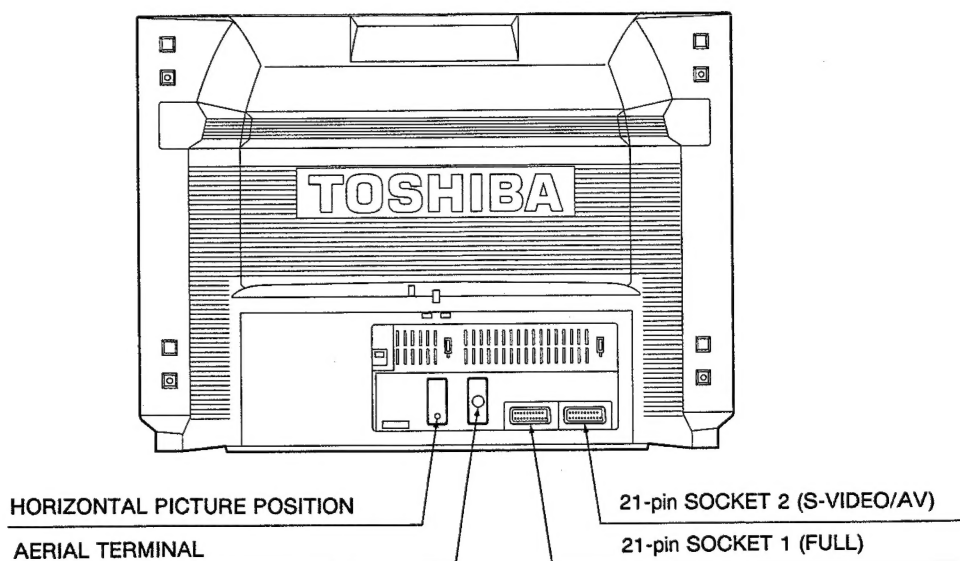
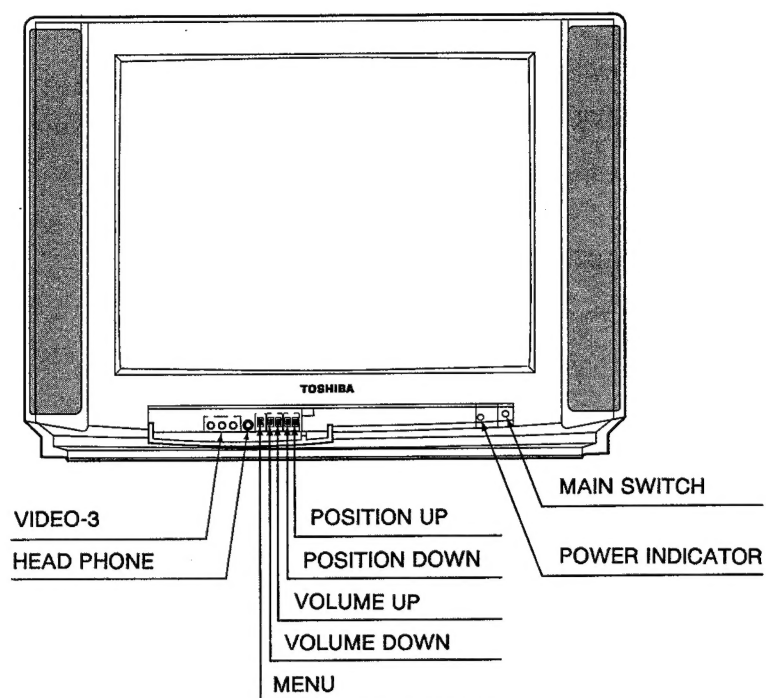
PRODUCT SAFETY NOTICE

Many electrical and mechanical components in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the X-ray radiation protection afforded by them cannot necessarily be obtained by using replacements rated at higher voltages or wattage, etc. Components which have these special safety characteristics in this manual and its supplements are identified by the international hazard symbols on the schematic diagram and parts list. Before replacing any of these components read the parts list in this manual carefully. Substitute replacement components which do not have the same safety characteristics as specified in the parts list may create X-ray radiation.

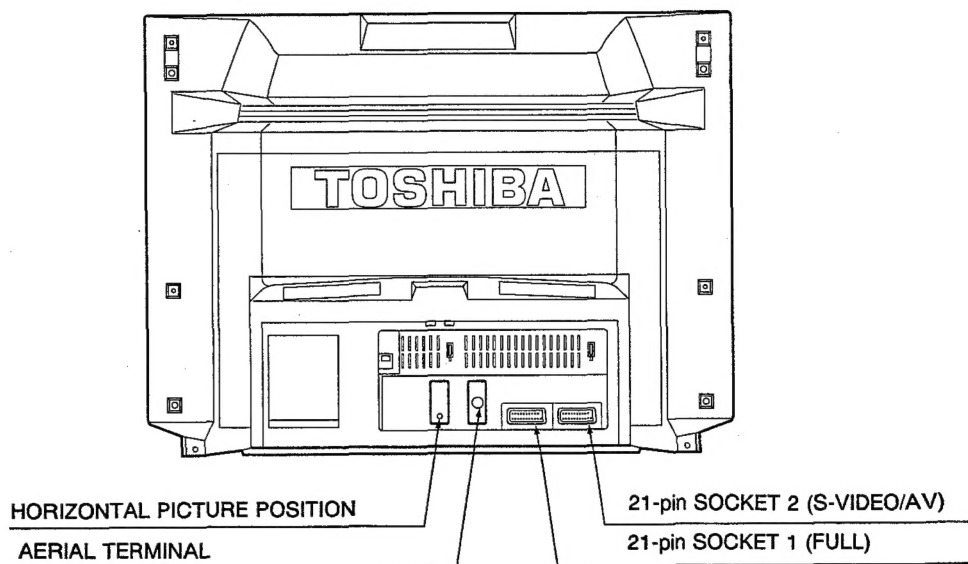
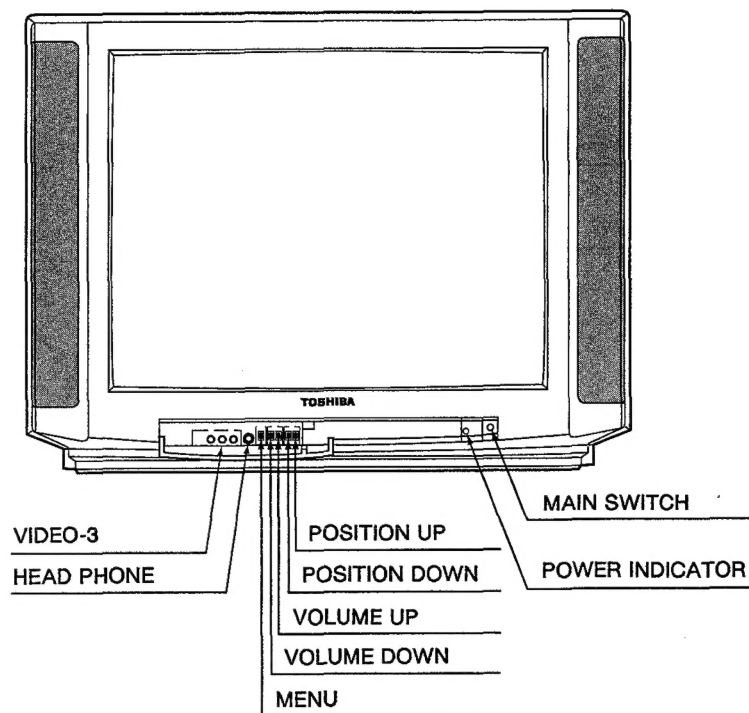
TABLE OF CONTENTS

FRONT CONTROLS AND REAR VIEWS (2563DN)	4
FRONT CONTROLS AND REAR VIEWS (2863DN)	5
REMOTE HAND HELD UNIT	6
CIRCUIT BLOCK DIAGRAM	7
INSTALLATION AND SERVICE ADJUSTMENTS	8
ELECTRICAL ADJUSTMENT	10
SETTING UP THE CHASSIS	12
SERVICE MODE	16
CABINET REPLACEMENT PARTS LIST (2563DN)	21
CABINET REPLACEMENT PARTS LIST (2863DN)	22
CHASSIS REPLACEMENT PARTS LIST	23
PC BOARD BOTTOM VIEW	33
TERMINAL VIEW OF TRANSISTORS	38
APPENDIX;	
CIRCUIT DIAGRAM	
SPECIFICATIONS	41

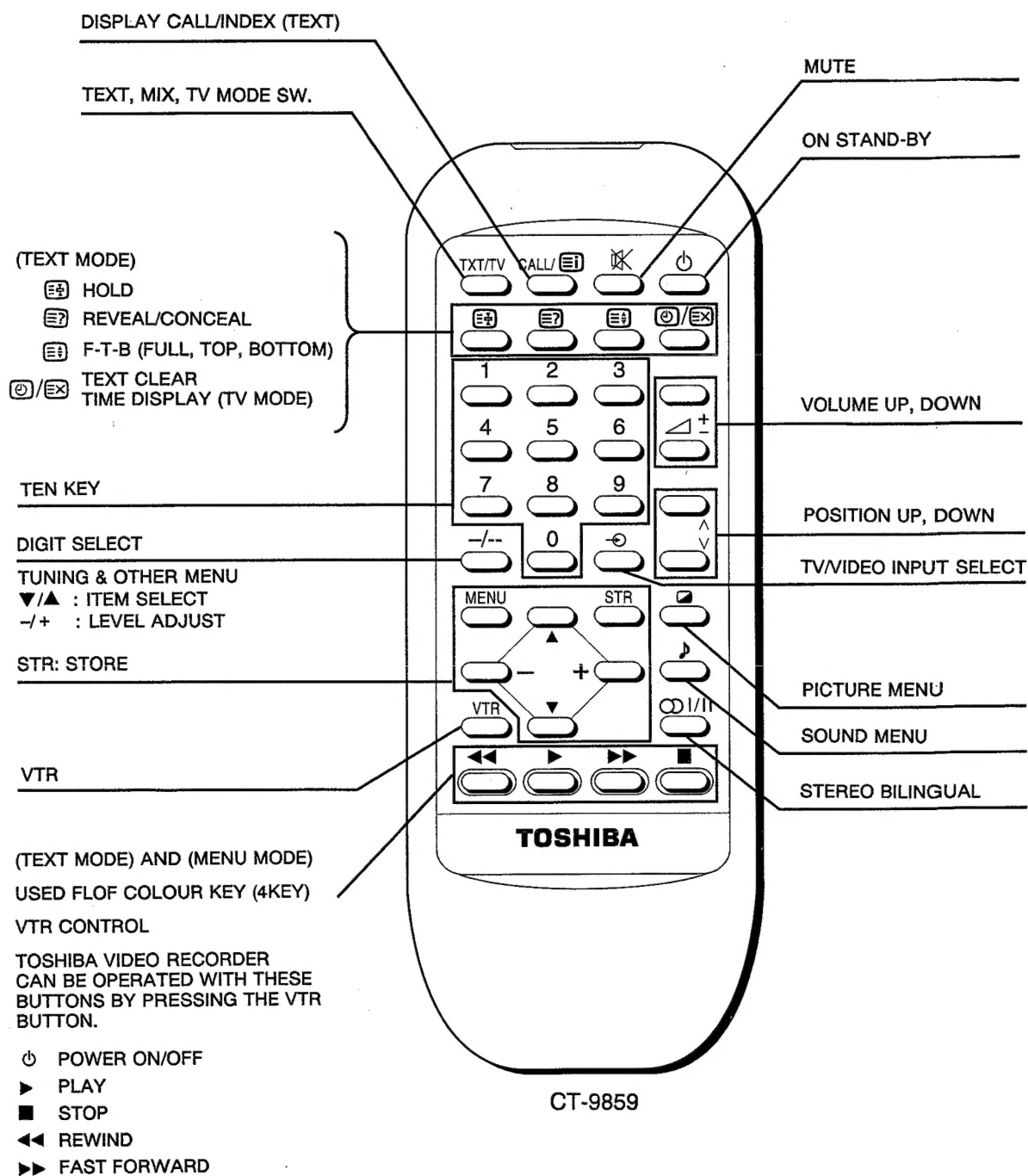
FRONT CONTROLS AND REAR VIEWS (2563DN)



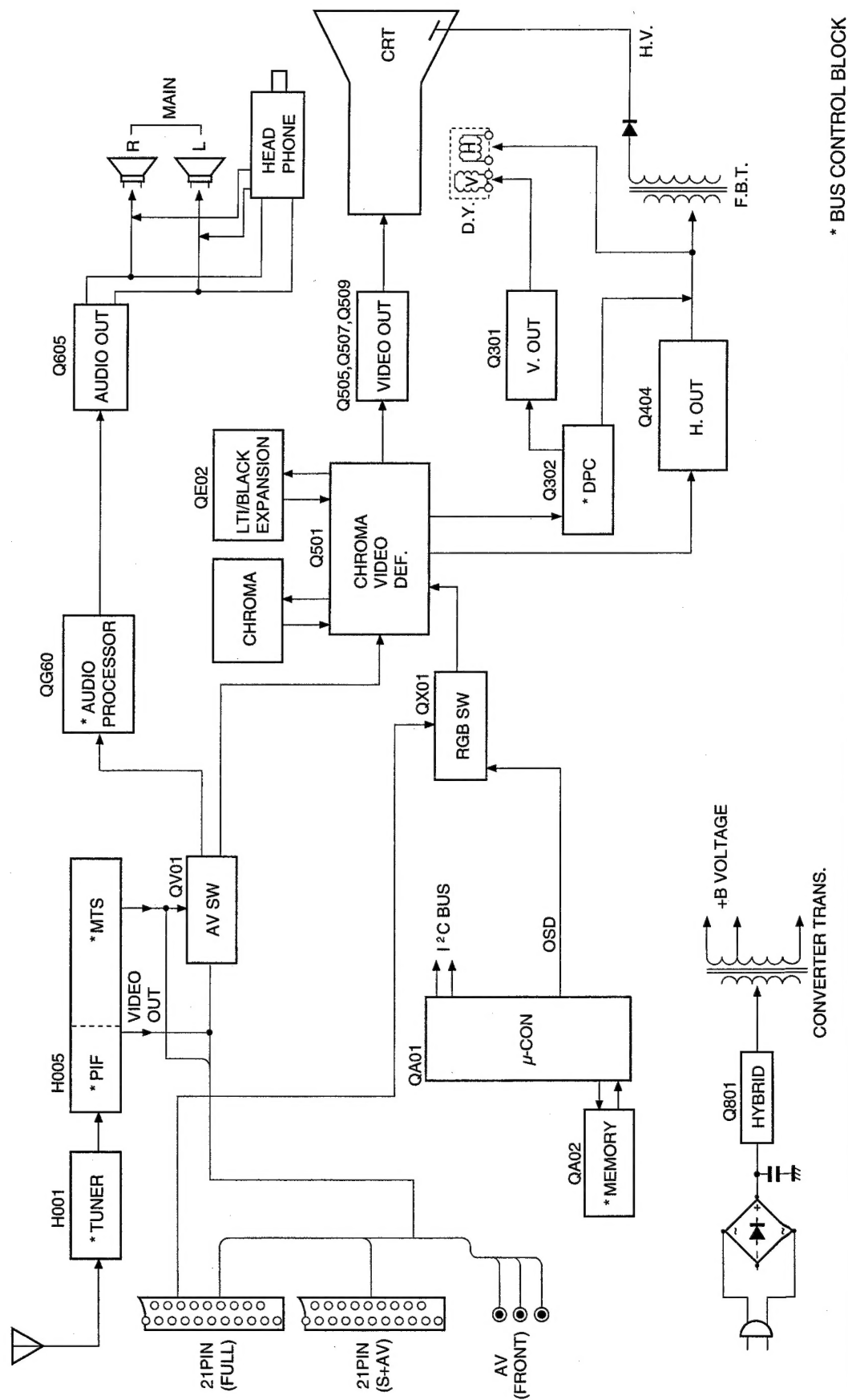
FRONT CONTROLS AND REAR VIEWS (2863DN)



REMOTE HAND HELD UNIT



CIRCUIT BLOCK DIAGRAM



* BUS CONTROL BLOCK

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

INSTALLATION AND SERVICE ADJUSTMENTS

GENERAL INFORMATION

All adjustments are thoroughly checked and corrected when the receiver leaves the factory. Therefore the receiver should operate normally and produce proper colour and B/W pictures upon installation. However, several minor adjustments may be required depending on the particular location in which the receiver is operated.

This receiver is shipped completely in cardboard carton. Carefully draw out the receiver from the carton and remove all packing materials. Plug the power cord into a convenient 220 volts 50 Hz AC two pin power outlet. Turn the receiver ON. Check and adjust all the customer controls such as BRIGHTNESS, CONTRAST and COLOUR Controls to obtain natural colour or B/W picture.

AUTOMATIC DEGAUSSING

A degaussing coil is mounted around the picture tube so that external degaussing after moving the receiver is normally unnecessary, providing the receiver is properly degaussed upon installation. The degaussing coil operates for about 1 second after the power to the receiver is switched ON. If the set is moved or faced in a different direction, the power switch must be switched off at least 30 minutes in order that the automatic degaussing circuit operates properly. Should the chassis or parts of the cabinet become magnetized to cause poor colour purity, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube, the sides and front of the receiver and slowly withdraw the coil to a distance of about 2 m before disconnecting it from AC source. If colour shading still persists, perform the COLOUR PURITY ADJUSTMENT and CONVERGENCE ADJUSTMENTS procedures.

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST Controls to minimum (zero beam current).
3. High voltage will be measured below 29.9 kV.
4. Rotate the BRIGHTNESS Control to both extremes to be sure the high voltage does not exceed the limit of 29.9 kV under any condition.

HORIZONTAL CENTER ADJUSTMENT

1. Receive the UK PHILIPS pattern.
2. Set the contrast and colour to centre, and the brightness to centre.
3. Adjust H. CENTER USER Control (R452) so the pattern centre can be located at the screen centre.

FOCUS ADJUSTMENT

Adjust FOCUS Control on FLYBACK TRANS. (T461) for well defined scanning lines in the centre area on the screen.

PAL MATRIX ADJUSTMENT

1. Tune in the colour programme of the Philips pattern.
2. Set the COLOUR Control to obtain the proper colour.
3. If the PAL MATRIX adjustment is incorrect, the Venetian Blind would appear in the colour bars area. This case needs the adjustment.
4. At the first, adjust DL PHASE ADJ. Coil (L551) to minimize the Venetian Blind.
5. Next adjust 1H-DL ADJ. VR (R551) to minimize the Blind.
6. If the Venetian Blind still remains, adjust 1H-DL PHASE ADJ. Coil (L551) to minimize the Blind again.
7. Repeat the item 5 and 6 procedures, adjust the R551 and L551 until the Blind does not appear.

CRT GREY SCALE ADJUSTMENT


1. Tune in an active channel.
2. Set the SERVICE SW. (S202) in the "H. LINE" position.
3. Turn the SCREEN Control (on T461) fully counter-clockwise.
4. By rotating the RED, GREEN and BLUE CUT OFF Controls (R557, R558, R559) to the mid position.
5. Set the GREEN and BLUE DRIVE Controls (R252, R253) to the center.
6. Rotate the SCREEN Control gradually clockwise until the first line appears slightly on the screen. Set the SCREEN Control to this position.
7. Adjust the CUT OFF Controls to obtain the slightly lighted horizontal lines in the same levels of three colours (RED, GREEN and BLUE).
The lines may look like white if the CUT OFF Controls are adjusted properly.
8. Set the SERVICE SW. (S202) in the "RECEIVE" position.
9. Set the CONTRAST and COLOUR Controls to minimum, and BRIGHTNESS Control to the maximum.
10. Adjust the BLUE and GREEN DRIVE Controls (R252/R253) to obtain proper white-balanced picture in high light areas.
11. Set the BRIGHTNESS and CONTRAST Controls to obtain dark grey raster. Then check the white balance in low brightness. If the white balance is not proper, retouch the CUT OFF Controls and DRIVE Controls to obtain a good white balance in both low and high light areas.

SUB-BRIGHTNESS ADJUSTMENT

1. Tune in a colour programme.
2. Set the CONTRAST Control to the minimum and the BRIGHTNESS Control to the centre.
3. Set the COLOUR Control to the centre.
4. Set the SUB-BRIGHT. Control (R255) to the centre and leave the receiver for five minutes in this state.
5. Watching the picture well, adjust the SUB-BRIGHT. Control in the position where the picture does not show evidence of blooming in high bright area and not appear too dark in low bright portion.
6. Check the proper picture variation by rotating the CONTRAST and BRIGHTNESS Controls to both extremes.
7. If the picture does not appear dark with the CONTRAST and BRIGHTNESS Controls turned to the minimum, or not appear bright with the controls turned to the maximum, adjust the SUB-BRIGHT. Control again for the acceptable picture.

ELECTRICAL ADJUSTMENT

MODEL NAME : C6SR
Circuit name : VIDEO/CHROMA

Adjustment parts	Name	Setting	Input signal	Measurement point	Instrument	Adjustment procedure	Adjustment standard
R551	PAL matrix VR (amplitude)		PHILIPS Pattern	Q501 62 pin	Synchroscope	Adjust IH-DL ADJ VR (R551) to minimize the blind.	(Same as Current) $\frac{E}{D} = \frac{1+A}{1-A} > 10$
L551	PAL matrix coil (phase)		PHILIPS Pattern	Q501 62 pin	Synchroscope	Adjust DL PHASE ADJ coil (L551) to minimize the Venetian Blind.	$\frac{Rn+1}{Rn} > 0.7$
R255	Sub-bright	Cont : MAX BRT : Center Color : Min.	Sub-bright signal	Screen adjustment		Adjust the number of black collapsed lines in the sub-bright signal.	5 ± 1.5 lines
R557~R559 Screen VR	Screen adjustment Cut-off adjustment	R557-R559 (Cut-off VR) R252, R253 Service switch Cont : Min BRT : Center Color : Min	→ Center → Center → ON (HORIZ-line)		1. Gradually increase the screen brightness until either R, G or B line starts to light up slightly. 2. Determine the screen VR adjustment position here. 3. Using the cut-off VR (R557 ~ R559), gradually increase remaining two lines until respective line starts to light up slightly. (Adjust until the screen becomes almost white.) 4. Turn off the service SW.		
R557 ~ R559 R252, R253	White balance	Color : Center BRT : Center CONT : MAX	Upper screen : White Lower screen : Black  Two-tone signal (Burst : ON)	CRT	W/B checker	● Use a checker which adjusts brightness by varying modulation ratio.	*DB, DD, DN, DS models HIGH LIGHT (103cd/m ²) 7195 K - 0.005 uv DARK (17cd/m ²) 7695 K - 0 uv * DF model HIGH LIGHT (103cd/m ²) 8750 K - 0.002 uv DARK (17cd/m ²) 8750 K - 0.002 uv

MODEL NAME : C6SR

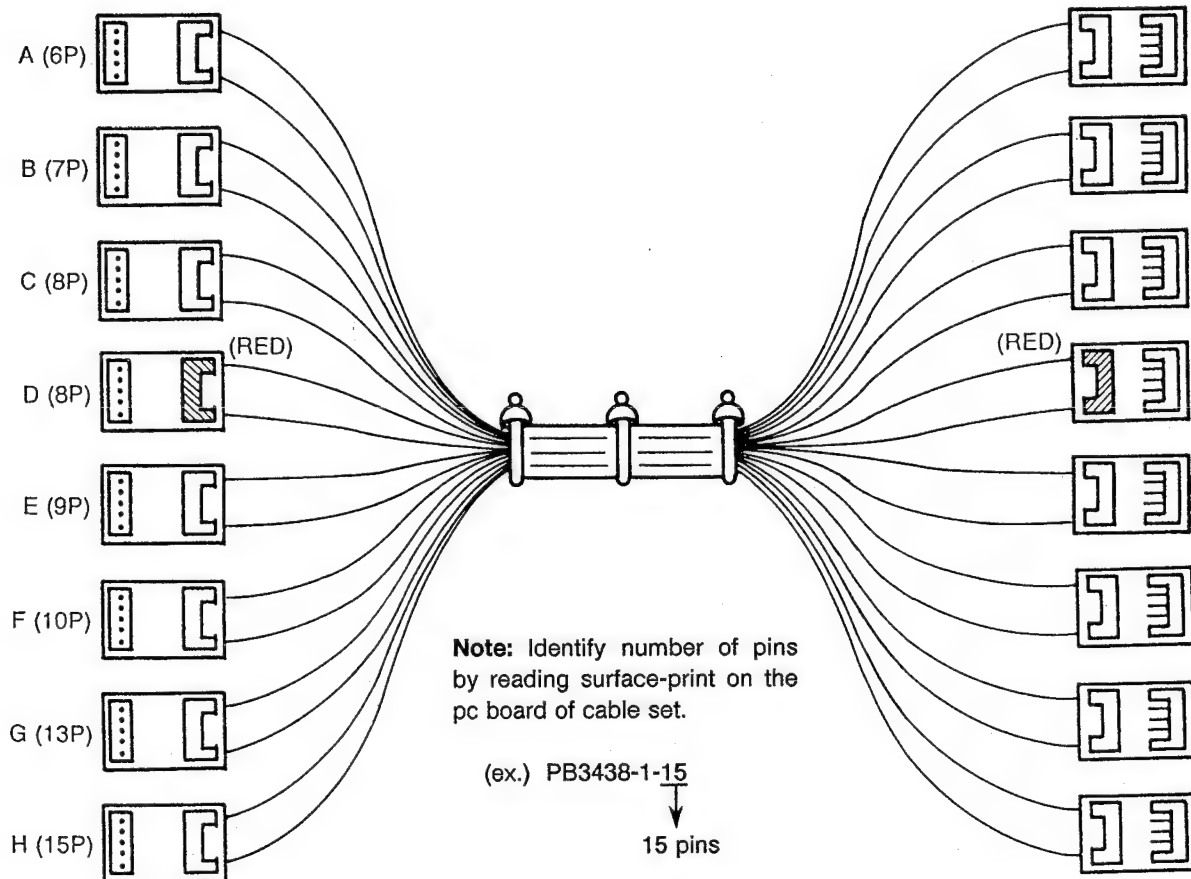
Adjustment part	Input point, Output point	Adjustment signal	Adjustment condition and procedure
: Horizontal amplitude adjustment : Pin-cushion distortion correction amount adjustment : Keystone distortion correction amount adjustment	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Visual adjustment with figures on the screen. (Bus control) </div>	WG Philips pattern. Do not use Philips pattern for FRANCE SECAM.	① Conditions: V. height, VERT position. After H. center adjustment, set the contrast to max., bright to center and color to center. ② Adjustment procedures a. Adjust the horizontal amplitude by the sub-address WID. • For French model: Adjust the horizontal amplitude so that the first inner white lines next to the left and right white flag of Philips pattern just disappear behind the frame. • For other models: adjust the horizontal amplitude so that the left and right white flags of Philips pattern just disappear behind the frame. b. By the sub-address DPC, make the left and right horizontal bar straight. c. By the sub-address KEY, correct the keystone distortion. d. Again, adjust the sub-address WID.
: HEIGHT : VERT. : POSITION	Visual adjustment with figures on the screen. (Bus control)	WG Philips pattern Do not use Philips pattern for FRANCESECAM.	① Conditions: Cont max, Bright cent, Color cent. ② Adjustment procedure a. Change V. Position by the sub-address VPS so that the upper and lower positions of the circle of Philips pattern come to the center of the screen. b. By the sub-address HIT, make the top and bottom flags of Philips pattern just disappear behind the frame.

SETTING UP THE CHASSIS

EXTENSION CABLE SET

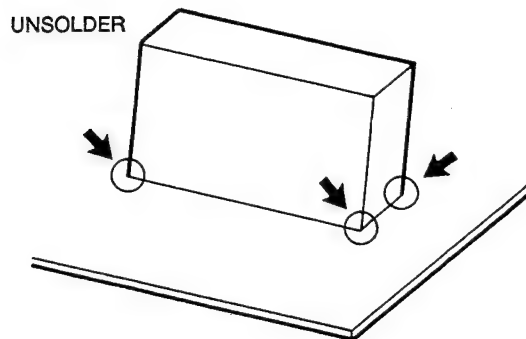
1. Extension Cable Set is available for servicing modules of C2DB chassis.
For 2863DB chassis, however, this cable is used for CHROMA Board and LTI/BLACK EXPANSION Board.
2. Identify number of pins by reading surface-print on the pc board of cable set.

Part No.	Description
23305270	Extension Cable Set

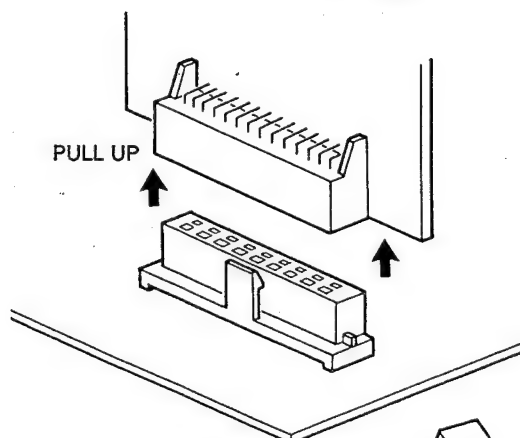


TO USE THE CABLE SET

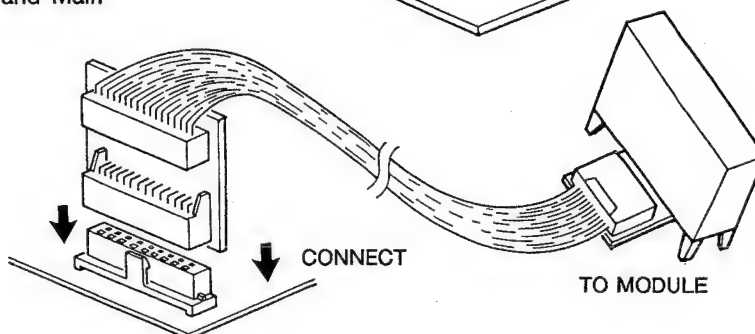
1. Unsolder corners on shielding case of module, which are marked with arrow in the figure.



2. Remove shielding case, and pull up module to disconnect.



3. Connect Extension Cable Set to module and Main board.

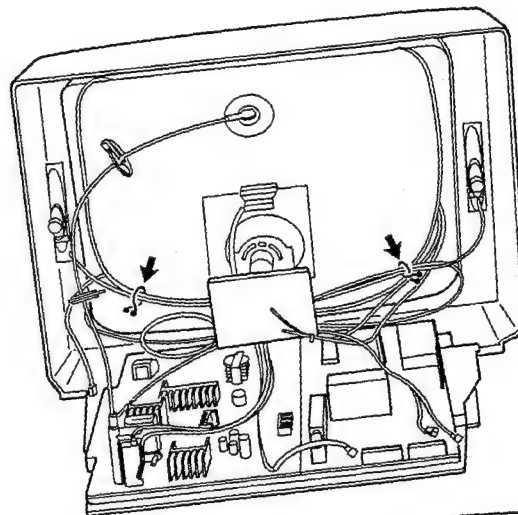


4. Reference chart of module and extension cable pin.

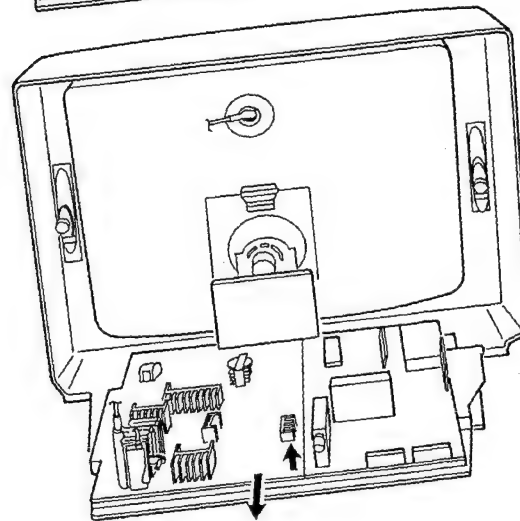
Board name	Number of pin
LTi/ BLACK EXPANSION	9P
CHROMA	10P

HOW TO MAKE THE CHASSIS STAND FOR REPAIR

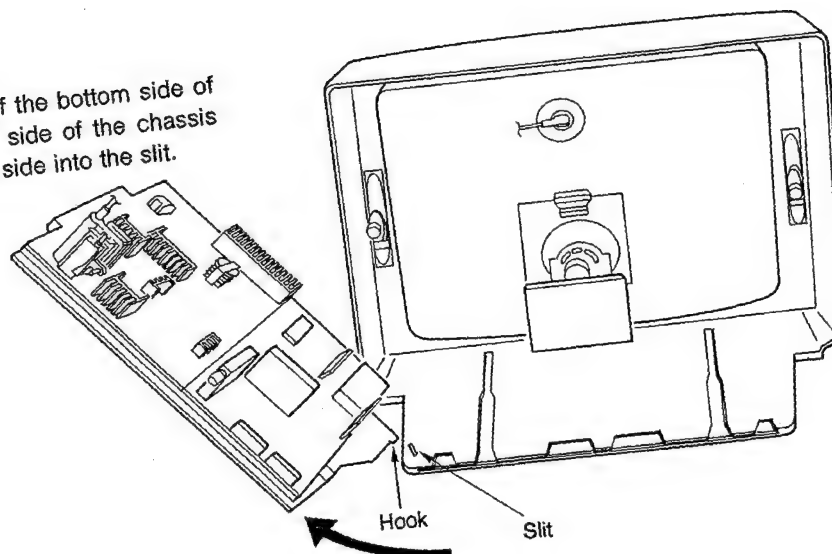
1. Disconnect the lead wires for the speaker fixed to the degausser coil with three omega clips.



2. Lifting up slightly, pull out the chassis from the front mask.



3. There is a slit at the left front of the bottom side of the front mask. Lift up the left side of the chassis and insert the hook at the right side into the slit.

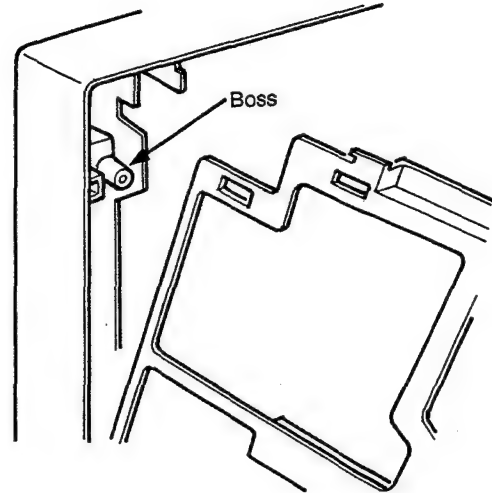


4. 2563DN:

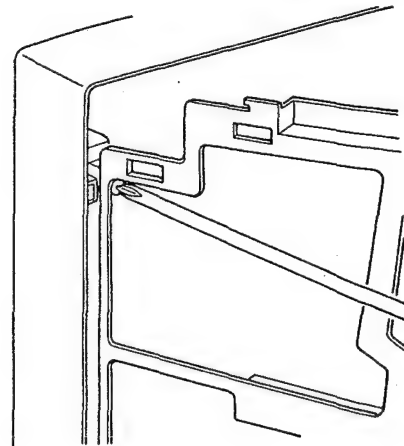
To retain the chassis, use the screw hole (boss) at the upper left for back cover positioning.

2863DN:

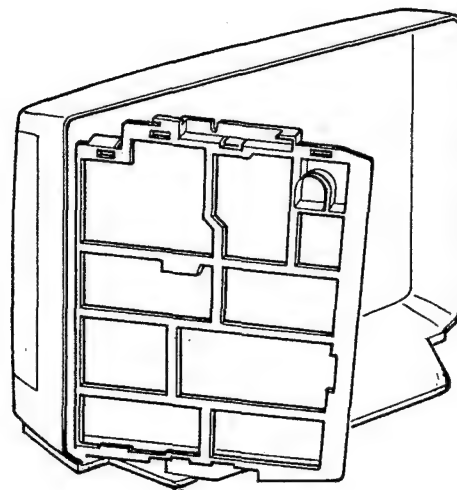
To retain the chassis, use the upper left boss (highest boss).



5. Fix it with screws for back cover fixing.




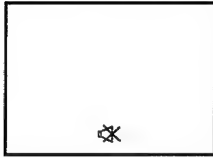
6. After repair works, restore the unit by reversing the above steps.




SERVICE MODE


1. ENTERING TO SERVICE MODE

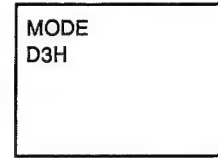
1) Press  button once on Remote Control.



2) Press  button again to keep pressing.





3) Keep pressing the  button, press MENU button on TV set.





(Service mode display)

2. SELECTING THE ADJUSTING ITEMS

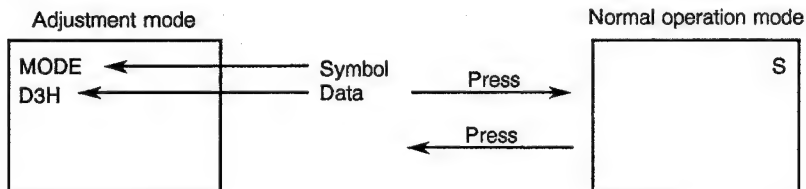
Every pressing of CHANNEL  button changes the adjustment items in the following order. ( button for reverse order.)

3. ADJUSTING THE DATA

Pressing of VOLUME  or  button will change the value of data in the range from 00 to FF. The variable range depends on the adjusting item.

4. NORMAL OPERATION ON THE SERVICE MODE

Press MENU button on TV.



5. EXIT FROM SERVICE MODE

Press POWER button on the remote control to turn off the TV once.

SELECTING THE ADJUSTING ITEMS

- 1) Every pressing of CHANNEL ▲ button changes the adjustment items in the following order. (▼ button for reverse order.)

	QA02 MEM ADR	ITEM NAME	Comment	2563DN		2863DN	
				Preset data	Reference data	Preset data	Reference data
S	0D3H	MODE	MODE DATA	DA	D8	DA	D8
S	0D4H	CNTX	SUB CONTRAST MAX	FF	←	FF	←
S	0D5H	CNTC	SUB CONTRAST CENTER	70	←	70	←
S	0D6H	CNTN	SUB CONTRAST MIN	2B	←	2B	←
F	0D7H	HIT	HIGHT	2A	40	2A	40
F	0D8H	LIN	V LINEARITY	11	0E	11	10
S	0D9H	VSC	V-S CORRECTION	0F	11	0F	0E
F	0DAH	VPS	V SHIFT	02	03	02	03
S	0DBH	VCP	V COMPENSATION	04	←	04	←
F	0DCH	WID	WIDTH	20	16	20	16
F	0DDH	DPC	E-W PARABOLA	20	←	20	←
S	0DEH	CNR	E-W CONER	0A	←	0A	←
F	0DFH	KEY	TRAPEZIUM	0A	09	0A	09
S	0E0H	HCP	H COMPENSATION	03	←	03	←
S	0E1H	VMC	V-f CORRECTION	00	0F	00	0F
S	0E2H	SHI	(WIDE) SUB HEIGHT	E3	DA	E3	DB
S	0E3H	SLI	(WIDE) SUB V LINEARITY	00	01	00	02
S	0E4H	SVS	(WIDE) SUB V-S CORRECTION	FA	←	FA	←
S	0E5H	SDP	(WIDE) SUB E-W PARABOLA	F0	←	F0	←
S	0E6H	SCN	(WIDE) SUB E-W CONER	FD	←	FD	←
S	0E7H	BASC	SUB BASS CENTER	08	←	08	←
S	0E8H	TREC	SUB TREBLE CENTER	07	←	07	←
S	0E9H	WON2		17	←	17	←
S	0EAH	UBCP	USER BASS DATA AT RESET OF EEPROM	00	←	00	←
S	0EBH	EMX	NICAM ERROR MAX	FC	←	FC	←
S	0ECH	EMN	NICAM ERROR MIN	64	←	64	←
S	0EDH	FMA	NICAM FM ATT	00	←	00	←
S	0EEH	STS	IGR STEREO SEPARATION	00	←	00	←
S	0EFH	TEXT	H/V POSITION OF TEXT	00	←	00	←

S ... semi-fixed data area which is fixed by model. (Do not adjust in field service.)

F ... This item may require adjustments by models after initialization, when QA02 is replaced.

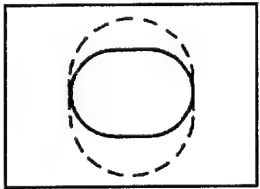
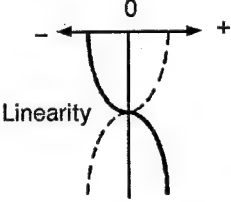
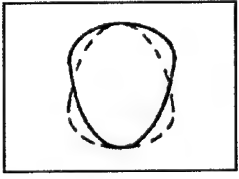
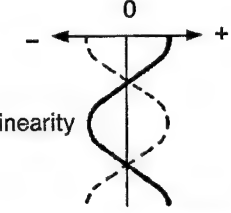
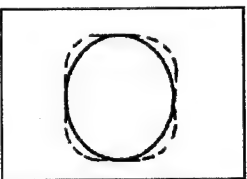
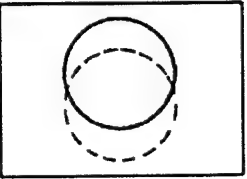
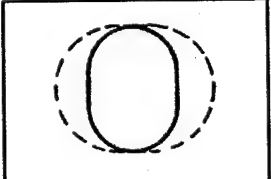
ADJUSTING THE DATA

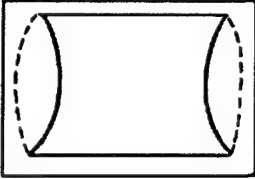
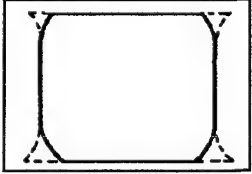
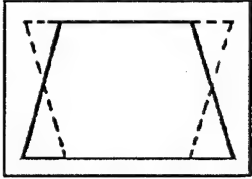

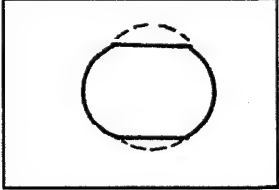
- 1) Pressing of VOLUME ▲ or ▼ button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

EXIT FROM SERVICE MODE

- 1) Press POWER button to turn off the TV once.

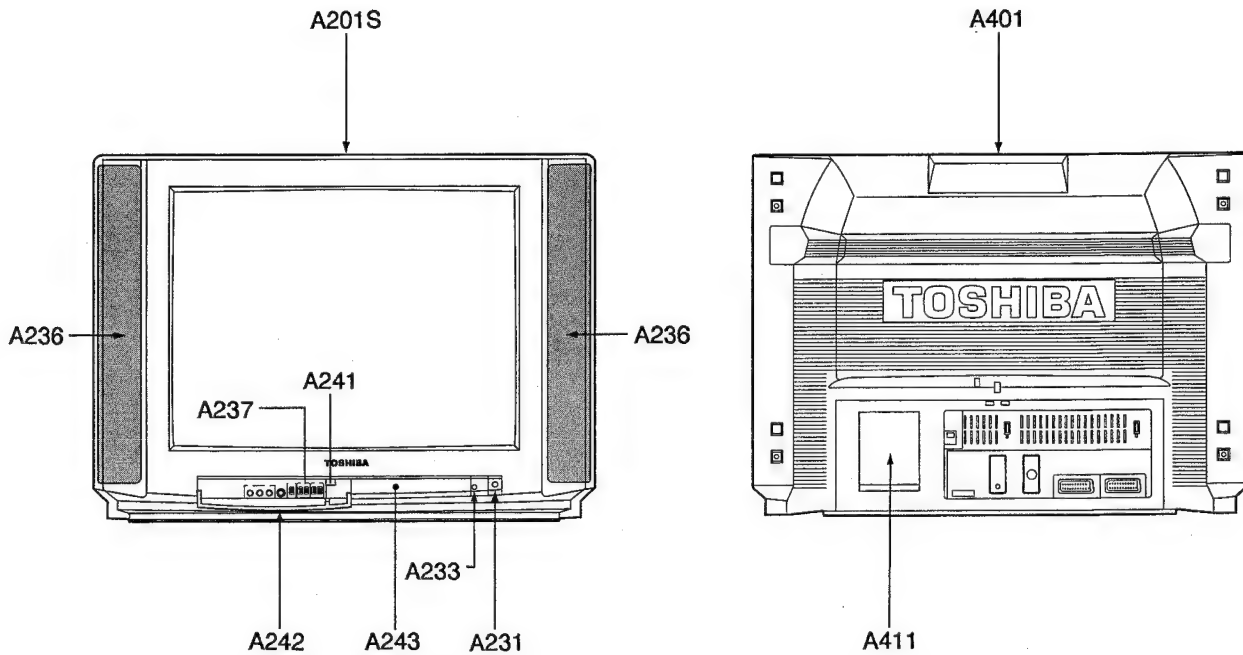
SUB DATA ADDITIONAL DESCRIPTION

Symbol	Description
HIT	V amplitude adjustment. 
LIN	V linearity correction 1. <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 20px;"> <p>0</p> <p>- ← → +</p>  </div> <div style="text-align: center;">  </div> </div> <p style="text-align: center;">Linearity balance between top and bottom screen.</p>
VSC	V linearity correction 2. <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 20px;"> <p>0</p> <p>- ← → +</p>  </div> <div style="text-align: center;">  </div> </div> <p style="text-align: center;">Linearity balance between top/bottom and center.</p>
VPS	V picture position adjustment. 
VCP	Setting of amount of V amplitude correction against variation of screen brightness.
WID	H amplitude adjustment. 

Symbol	Description
DPC	<p>H pin-cushion distortion correction.</p> 
CNR	<p>H pin-cushion distortion correction at four corners.</p> 
KEY	<p>Pedestal distortion correction.</p> 
HCP	<p>Setting of amount of H amplitude correction against variation of screen brightness.</p>
VMC	<p>V linearity correction. Linearity balance at 1/4, 3/4 areas from top.</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Linearity</p>  </div>  </div>

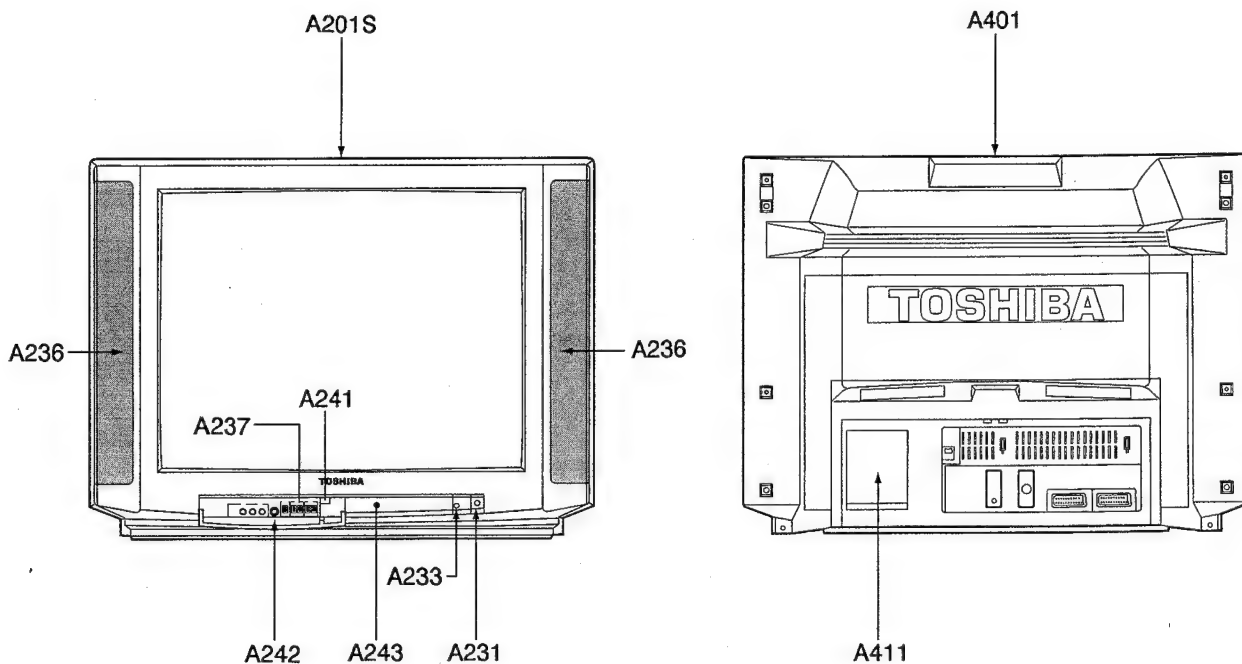
Adjustment parts or Bus control item	Input point/ Output point	Adjustment signal	Adjustment conditions and procedures
: Horizontal amplitude adjustment (WID) : Pin distortion compensation amount adjustment (DPC) : Keystone distortion compensation amount adjustment (KEY)	Visual check of picture (Bus control)	UK Philips pattern Do not use the Philips pattern of FRANCE SECAM.	1. Conditions: After V. HEIGHT, VERT POSITION and H. CENT have been adjusted, set the controllers as follows: Contrast: Max Brightness: Center Color: Center 2. Adjustment procedure a. Adjust the horizontal amplitude by the sub address WID. Adjust so that the left and right white flags of Philips pattern disappear at the very limits. b. Make the left and right vertical bars straight by the sub address DPC. c. Compensate the key distortion by the sub address KEY. d. Again, adjust the sub address WID.
: HEIGHT (HIT) : VERT. POSITION	Visual check of picture (Bus control)	WG Philips pattern Do not use the Philips pattern of FRANCE SECAM.	1. Conditions: Contrast: Max Brightness: Center Color: Center 2. Adjustment procedure a. By the bus address VPS, adjust V. position so that the circle of Philips pattern comes to the vertical center. b. Adjust HIT so that the upper and lower flags of Philips pattern disappear at the very limits.

CABINET REPLACEMENT PARTS LIST (2563DN)



Location No.	Part No.	Description
A201S	23510037	Front Cover
A231	23444895	Button, Power
A233	23430321	Lens (Remote)
A236	23519547	Speaker Grille
A237	23443966	Button, control
A241	70368125	Push Catch for Door
A242	23426921	Door
A243	23421752	Piece (Decorative)
△ A401	23426795	Back Cover
A411	23560157	Label, Model No.

CABINET REPLACEMENT PARTS LIST (2863DN)



Location No.	Part No.	Description
A201S	23510019	Front Cover
A231	23444895	Button, Power
A233	23430321	Lens (REMOTE)
A236	23519547	Speaker Grille
A237	23443966	Button, control
A241	70368125	Push Catch for Door
A242	23426921	Door
A243	23421752	Piece (Decorative)
△A401	23426393	Back Cover
A411	23560145	Label, Model No.

CHASSIS REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 2 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with * mark is no longer available after the end of the production.

ABBREVIATIONS:

Capacitors.....	CD : Ceramic Disk	PF : Plastic Film	EL : Electrolytic
Resistors.....	CF : Carbon Film	CC : Carbon Composition	MF : Metal Film
	OMF : Oxide Metal Film	VR : Variable Resistor	FR : Fusible Resistor

(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/6W unless otherwise noted.)

Location No.	Part No.	Description
CAPACITORS		
C100	24794221	EL, 220 μ F, $\pm 20\%$, 16V
C101	24794221	EL, 220 μ F, $\pm 20\%$, 16V
C102	24232103	CD, 0.01 μ F, $+80\%$, -20%
C103	24232103	CD, 0.01 μ F, $+80\%$, -20%
C120	24232103	CD, 0.01 μ F, $+80\%$, -20%
C182	24232103	CD, 0.01 μ F, $+80\%$, -20%
C183	24797229	EL, 2.2 μ F, $\pm 20\%$, 50V
C185	24232103	CD, 0.01 μ F, $+80\%$, -20%
C188	24797100	EL, 10 μ F, $\pm 20\%$, 50V
C189	24232103	CD, 0.01 μ F, $+80\%$, -20%
C190	24232103	CD, 0.01 μ F, $+80\%$, -20%
C193	24797100	EL, 10 μ F, $\pm 20\%$, 50V
C202	24794101	EL, 100 μ F, $\pm 20\%$, 16V
C203	24232103	CD, 0.01 μ F, $+80\%$, -20%
C204	24797220	EL, 22 μ F, $\pm 20\%$, 50V
C205	24797478	EL, 0.47 μ F, $\pm 20\%$, 50V
C206	24232103	CD, 0.01 μ F, $+80\%$, -20%
C207	24794100	EL, 10 μ F, $\pm 20\%$, 16V
C208	24436220	CD, 22pF
C209	24232103	CD, 0.01 μ F, $+80\%$, -20%
C210	24797100	EL, 10 μ F, $\pm 20\%$, 50V
C211	24232103	CD, 0.01 μ F, $+80\%$, -20%
C212	24232103	CD, 0.01 μ F, $+80\%$, -20%
C213	24232103	CD, 0.01 μ F, $+80\%$, -20%
C215	24436330	CD, 33pF
C240	24567474	PF, 0.47 μ F
C301	24085944	EL, 2.2 μ F, $\pm 20\%$, 50V, Non-Polar
C302	24212152	CD, 1500pF, $\pm 10\%$
C303	24214221	CD, 220pF, $\pm 10\%$, 500V
C304	24590102	PF, 1000pF
C305	24617912	EL, 2.2 μ F, $\pm 10\%$, 50V
C306	24073059	EL, 3300 μ F, $\pm 20\%$, 25V
C307	24232103	CD, 0.01 μ F, $+80\%$, -20%
C308	24693473	PF, 0.047 μ F, 100V
C310	24765222	EL, 2200 μ F, $\pm 20\%$, 35V
C311	24214391	CD, 390pF, $\pm 10\%$, 500V
C313	24082057	PF, 0.22 μ F, 100V
C314	24591563	PF, 0.056 μ F
C315	24590104	PF, 0.1 μ F

Location No.	Part No.	Description
C316	24567474	PF, 0.47 μ F
C317	24617926	EL, 220 μ F, $\pm 20\%$, 16V
C318	24668221	EL, 220 μ F, $\pm 20\%$, 35V
C319	24212102	CD, 1000pF, $\pm 10\%$
C321	24591183	PF, 0.018 μ F
C322	24617912	EL, 2.2 μ F, $\pm 10\%$, 50V
C323	24590683	PF, 0.068 μ F
C324	24538224	PF, 0.22 μ F
C326	24567474	PF, 0.47 μ F
C341	24794101	EL, 100 μ F, $\pm 20\%$, 16V
C378	24590104	PF, 0.1 μ F
C379	24232103	CD, 0.01 μ F, $+80\%$, -20%
C380	24212102	CD, 1000pF, $\pm 10\%$
C401	24617920	EL, 120 μ F, $\pm 20\%$, 25V
C402	24353241	CD, 240pF
C403	24797339	EL, 3.3 μ F, $\pm 20\%$, 50V
C405	24590183	PF, 0.018 μ F
C406	24590183	PF, 0.018 μ F
C407	24590273	PF, 0.027 μ F
C408	24794221	EL, 220 μ F, $\pm 20\%$, 16V
C409	24232103	CD, 0.01 μ F, $+80\%$, -20%
C410	24082261	PF, 5600pF, 100V
C411	24435330	CD, 33pF, 500V
C412	24590182	PF, 1800pF
C413	24214391	CD, 390pF, $\pm 10\%$, 500V
C414	24212471	CD, 470pF, $\pm 10\%$
C416	24709100	EL, 10 μ F, $\pm 20\%$, 200V
C417	24214821	CD, 820pF, $\pm 10\%$, 500V
C421	24082673	PF, 0.47 μ F, 250V
C422	24829823	PF, 0.082 μ F, 400V
C423	24082673	PF, 0.47 μ F, 250V
C430	24567474	PF, 0.47 μ F
C440	24082478	PF, 6200pF, $\pm 3\%$
C441	24214221	CD, 220pF, $\pm 10\%$, 500V
C443	24214221	CD, 220pF, $\pm 10\%$, 500V
C444	24082518	PF, 5600pF, $\pm 3\%$, 1800V
C445	24095903	PF, 0.056 μ F, $\pm 10\%$, 250V
C446	24095883	PF, 0.015 μ F, $\pm 3\%$, 630V
C447	24700100	EL, 10 μ F, $\pm 20\%$, 250V
C448	24640962	EL, 33 μ F, $\pm 20\%$, 200V
C449	24667102	EL, 1000 μ F, $\pm 20\%$, 25V

Location No.	Part No.	Description
C450	24794471	EL, 470 μ F, \pm 20%, 16V
C463	24212222	CD, 2200pF, \pm 10%
C464	24082712	PF, 1.5 μ F, 250V
C466	24082669	PF, 0.33 μ F, 250V
C470	24794220	EL, 22 μ F, \pm 20%, 16V
C471	24567474	PF, 0.47 μ F
C473	24567474	PF, 0.47 μ F
C501	24794331	EL, 330 μ F, \pm 20%, 16V
C502	24474181	CD, 180pF, \pm 10%
C503	24436181	CD, 180pF
C505	24590273	PF, 0.027 μ F
C507	24590103	PF, 0.01 μ F
C508	24085944	EL, 2.2 μ F, \pm 20%, 50V, Non-Polar
C509	24353330	CD, 33pF
C510	24232103	CD, 0.01 μ F, +80%, -20%
C511	24232103	CD, 0.01 μ F, +80%, -20%
C512	24353220	CD, 22pF
C513	24232103	CD, 0.01 μ F, +80%, -20%
C515	24797220	EL, 22 μ F, \pm 20%, 50V
C516	24590104	PF, 0.1 μ F
C517	24590104	PF, 0.1 μ F
C518	24232103	CD, 0.01 μ F, +80%, -20%
C520	24797478	EL, 0.47 μ F, \pm 20%, 50V
C521	24538104	PF, 0.1 μ F
C522	24538104	PF, 0.1 μ F
C523	24538104	PF, 0.1 μ F
C524	24232103	CD, 0.01 μ F, +80%, -20%
C525	24436220	CD, 22pF
C526	24436220	CD, 22pF
C527	24436220	CD, 22pF
C531	24794100	EL, 10 μ F, \pm 20%, 16V
C535	24797100	EL, 10 μ F, \pm 20%, 50V
C536	24797478	EL, 0.47 μ F, \pm 20%, 50V
C537	24794471	EL, 470 μ F, \pm 20%, 16V
C540	24436331	CD, 330pF
C541	24436331	CD, 330pF
C542	24436331	CD, 330pF
C626	24797470	EL, 47 μ F, \pm 20%, 50V
C633	24538124	PF, 0.12 μ F
C634	24538124	PF, 0.12 μ F
C636	24797229	EL, 2.2 μ F, \pm 20%, 50V
C637	24667470	EL, 47 μ F, \pm 20%, 25V
C638	24667470	EL, 47 μ F, \pm 20%, 25V
C639	24796101	EL, 100 μ F, \pm 20%, 35V
C641	24795470	EL, 47 μ F, \pm 20%, 25V
C642	24797229	EL, 2.2 μ F, \pm 20%, 50V
C643	24797479	EL, 4.7 μ F, \pm 20%, 50V
C644	24667102	EL, 1000 μ F, \pm 20%, 25V
C646	24667102	EL, 1000 μ F, \pm 20%, 25V
C647	24232103	CD, 0.01 μ F, +80%, -20%
C660	24797478	EL, 0.47 μ F, \pm 20%, 50V
C674	24590102	PF, 1000pF
C677	24590102	PF, 1000pF
C684	24232103	CD, 0.01 μ F, +80%, -20%
C685	24232103	CD, 0.01 μ F, +80%, -20%
△C801	24082363	PF, 0.22 μ F, \pm 20%, AC250V
△C802	24092457	CD 2200pF, \pm 20%, AC400V
△C803	24092457	CD 2200pF, \pm 20%, AC400V
C807	24092281	CD, 4700pF, \pm 20%, AC250V
C808	24092281	CD, 4700pF, \pm 20%, AC250V
C809	24086037	EL, 270 μ F, \pm 20%, 400V
C810	24667331	EL, 330 μ F, \pm 20%, 25V
C811	24214471	CD, 470pF, \pm 10%, 500V

Location No.	Part No.	Description
C812	24676220	EL, 22 μ F, \pm 20%, 100V
C813	24590222	PF, 2200pF
C814	24214471	CD, 470pF, \pm 10%, 500V
C815	24095931	PF, 2200pF, 1250V
C816	24795470	EL, 47 μ F, \pm 20%, 25V
C817	24092341	CD, 470pF, \pm 10%, 2kV
C818	24214471	CD, 470pF, \pm 10%, 500V
C819	24797470	EL, 47 μ F, \pm 20%, 50V
C820	24794470	EL, 47 μ F, \pm 20%, 16V
C827	24794102	EL, 1000 μ F, \pm 20%, 16V
C828	24212101	CD, 100pF, \pm 10%
C829	24796222	EL, 2200 μ F, \pm 20%, 35V
C830	24092337	CD, 220pF, \pm 10%, 2kV
C831	24086953	EL, 220 μ F, \pm 20%, 160V
C833	24797100	EL, 10 μ F, \pm 20%, 50V
C835	24797479	EL, 4.7 μ F, \pm 20%, 50V
C836	24797100	EL, 10 μ F, \pm 20%, 50V
C837	24797100	EL, 10 μ F, \pm 20%, 50V
C840	24214471	CD, 470pF, \pm 10%, 500V
C846	24590104	PF, 0.1 μ F
C849	24214471	CD, 470pF, \pm 10%, 500V
C892	24794470	EL, 47 μ F, \pm 20%, 16V
C901	24700100	EL, 10 μ F, \pm 20%, 250V
C902	24092353	CD, 4700pF, \pm 10%, 2kV
CA12	24794471	EL, 470 μ F, \pm 20%, 16V
CA23	24590104	PF, 0.1 μ F
CA24	24590104	PF, 0.1 μ F
CA25	24590104	PF, 0.1 μ F
CA31	24797470	EL, 47 μ F, \pm 20%, 50V
CA35	24212101	CD, 100pF, \pm 10%
CA38	24232103	CD, 0.01 μ F, +80%, -20%
CA39	24232103	CD, 0.01 μ F, +80%, -20%
CA41	24436560	CD, 56pF
CA42	24436560	CD, 56pF
CA43	24232103	CD, 0.01 μ F, +80%, -20%
CA44	24590104	PF, 0.1 μ F
CA45	24797100	EL, 10 μ F, \pm 20%, 50V
CA68	24797100	EL, 10 μ F, \pm 20%, 50V
CA69	24232103	CD, 0.01 μ F, +80%, -20%
CB02	24794470	EL, 47 μ F, \pm 20%, 16V
CB09	24794330	EL, 33 μ F, \pm 20%, 16V
CB10	24797010	EL, 1 μ F, \pm 20%, 50V
CB11	24436181	CD, 180pF
CB12	24212561	CD, 560pF, \pm 10%
CB13	24212472	CD, 4700pF, \pm 10%
CB14	24797229	EL, 2.2 μ F, \pm 20%, 50V
CB15	24232103	CD, 0.01 μ F, +80%, -20%
CC02	24212102	CD, 1000pF, \pm 10%
CC03	24212102	CD, 1000pF, \pm 10%
CD01	24796220	EL, 22 μ F, \pm 20%, 35V
CD11	24676339	EL, 3.3 μ F, \pm 20%, 100V
CE01	24794100	EL, 10 μ F, \pm 20%, 16V
CE02	24797100	EL, 10 μ F, \pm 20%, 50V
CE03	24436820	CD, 82pF
CE04	24797010	EL, 1 μ F, \pm 20%, 50V
CE30	24538274	PF, 0.27 μ F
CG60	24794470	EL, 47 μ F, \pm 20%, 16V
CG61	24794101	EL, 100 μ F, \pm 20%, 16V
CG62	24232103	CD, 0.01 μ F, +80%, -20%
CG63	24085944	EL, 2.2 μ F, \pm 20%, 50V, Non-Polar
CG64	24085944	EL, 2.2 μ F, \pm 20%, 50V, Non-Polar

Location No.	Part No.	Description
CG65	24085958	EL, 1.0 μ F, \pm 20%, 50V, Non-Polar
CG66	24085958	EL, 1.0 μ F, \pm 20%, 50V, Non-Polar
CG67	24590822	PF, 8200pF
CG68	24590822	PF, 8200pF
CG69	24590123	PF, 0.012 μ F
CG70	24590123	PF, 0.012 μ F
CG71	24232103	CD, 0.01 μ F, +80%, -20%
CG72	24232103	CD, 0.01 μ F, +80%, -20%
CG73	24203100	EL, 10 μ F, \pm 20%, 16V
CG74	24232103	CD, 0.01 μ F, +80%, -20%
CG75	24669479	EL, 4.7 μ F, \pm 20%, 50V
CG76	24669479	EL, 4.7 μ F, \pm 20%, 50V
CM12	24590104	PF, 0.1 μ F
CN01	24473270	CD, 27pF
CN02	24473270	CD, 27pF
CN04	24436101	CD, 100pF
CN07	24232103	CD, 0.01 μ F, +80%, -20%
CN13	24474121	CD, 120pF, \pm 10%
CN14	24474102	CD, 1000pF, \pm 10%
CN16	24590103	PF, 0.01 μ F
CN17	24232103	CD, 0.01 μ F, +80%, -20%
CV01	24797100	EL, 10 μ F, \pm 20%, 50V
CV02	24206010	EL, 1 μ F, 50V
CV03	24797100	EL, 10 μ F, \pm 20%, 50V
CV04	24206010	EL, 1 μ F, 50V
CV05	24232103	CD, 0.01 μ F, +80%, -20%
CV06	24797100	EL, 10 μ F, \pm 20%, 50V
CV07	24797010	EL, 1 μ F, \pm 20%, 50V
CV08	24797010	EL, 1 μ F, \pm 20%, 50V
CV10	24797010	EL, 1 μ F, \pm 20%, 50V
CV11	24797010	EL, 1 μ F, \pm 20%, 50V
CV12	24797100	EL, 10 μ F, \pm 20%, 50V
CV14	24232103	CD, 0.01 μ F, +80%, -20%
CV15	24797100	EL, 10 μ F, \pm 20%, 50V
CV16	24794100	EL, 10 μ F, \pm 20%, 16V
CV17	24794100	EL, 10 μ F, \pm 20%, 16V
CV18	24797220	EL, 22 μ F, \pm 20%, 50V
CV19	24232103	CD, 0.01 μ F, +80%, -20%
CV20	24212102	CD, 1000pF, \pm 10%
CV21	24212102	CD, 1000pF, \pm 10%
CV23	24793471	EL, 470 μ F, \pm 20%, 10V
CV24	24212102	CD, 1000pF, \pm 10%
CV25	24212102	CD, 1000pF, \pm 10%
CV26	24212102	CD, 1000pF, \pm 10%
CV27	24212102	CD, 1000pF, \pm 10%
CV31	24793471	EL, 470 μ F, \pm 20%, 10V
CV32	24797101	EL, 100 μ F, \pm 20%, 50V
CV33	24085981	EL, 10 μ F, \pm 20%, 16V, Non-Polar
CV34	24797100	EL, 10 μ F, \pm 20%, 50V
CV35	24085981	EL, 10 μ F, \pm 20%, 16V, Non-Polar
CV37	24212152	CD, 1500pF, \pm 10%
CV38	24212152	CD, 1500pF, \pm 10%
CV39	24212152	CD, 1500pF, \pm 10%
CV40	24212152	CD, 1500pF, \pm 10%
CV41	24232103	CD, 0.01 μ F, +80%, -20%
CV46	24794331	EL, 330 μ F, \pm 20%, 16V
CV72	24794220	EL, 22 μ F, \pm 20%, 16V
CV73	24794220	EL, 22 μ F, \pm 20%, 16V
CV74	24436470	CD, 47pF
CX02	24797478	EL, 0.47 μ F, \pm 20%, 50V

Location No.	Part No.	Description
CX03	24797478	EL, 0.47 μ F, \pm 20%, 50V
CX04	24797478	EL, 0.47 μ F, \pm 20%, 50V
CX05	24206010	EL, 1 μ F, 50V
CX06	24206010	EL, 1 μ F, 50V
CX07	24206010	EL, 1 μ F, 50V
CX08	24797100	EL, 10 μ F, \pm 20%, 50V
CX09	24797010	EL, 1 μ F, \pm 20%, 50V
CX10	24797010	EL, 1 μ F, \pm 20%, 50V
CX11	24797010	EL, 1 μ F, \pm 20%, 50V

RESISTORS

R201	24366102	CF, 1k ohm
R202	24366122	CF, 1200 ohm
R203	24366222	CF, 2200 ohm
R211	24366473	CF, 47k ohm
R212	24366103	CF, 10k ohm
R214	24366182	CF, 1800 ohm
R215	24366152	CF, 1500 ohm
R216	24366333	CF, 33k ohm
R217	24366273	CF, 27k ohm
R218	24366472	CF, 4700 ohm
R219	24366472	CF, 4700 ohm
R222	24366103	CF, 10k ohm
R223	24366472	CF, 4700 ohm
R224	24366183	CF, 18k ohm
R228	24366182	CF, 1800 ohm
R231	24366102	CF, 1k ohm
R237	24366221	CF, 220 ohm
R242	24366163	CF, 16k ohm (2563DN)
R242	24366123	CF, 12k ohm (2863DN)
R243	24366103	CF, 10k ohm
R244	24366203	CF, 20k ohm
R245	24366622	CF, 6200 ohm
R246	24366103	CF, 10k ohm
R247	24366101	CF, 100 ohm
R252	24066596	VR, 500 ohm, 1/10W
R253	24066596	VR, 500 ohm, 1/10W
R255	24066601	VR, 20k ohm, 1/10W
R260	24366473	CF, 47k ohm
R261	24366153	CF, 15k ohm
R262	24366223	CF, 22k ohm
R266	24366223	CF, 22k ohm
R267	24366153	CF, 15k ohm
R268	24366473	CF, 47k ohm
R270	24366822	CF, 8200 ohm
R283	24366101	CF, 100 ohm
R301	24366221	CF, 220 ohm
R302	24366274	CF, 270k ohm
R303	24366473	CF, 47k ohm
R304	24366473	CF, 47k ohm (2563DN)
R304	24366333	CF, 33k ohm (2863DN)
R305	24366151	CF, 150 ohm
R306	24366683	CF, 68k ohm (2563DN)
R306	24366563	CF, 56k ohm (2863DN)
R307	24366564	CF, 560k ohm (2563DN)
R307	24366394	CF, 390k ohm (2863DN)
R308	24366102	CF, 1k ohm
R309	24383561	OMF, 560 ohm, 2W
R311	24366473	CF, 47k ohm
R312	24366204	CF, 200k ohm
R313	24366104	CF, 100k ohm
R314	24366105	CF, 1M ohm
R315	24366155	CF, 1.5M ohm
R316	24366154	CF, 150k ohm

Location No.	Part No.	Description
R318	24366101	CF, 100 ohm
R319	24366101	CF, 100 ohm
R320	24366101	CF, 100 ohm
R321	24366102	CF, 1k ohm
R322	24321159	MF, 1.5 ohm, 1/2W
R323	24322828	OMF, 0.82 ohm, 1W
R324	24366682	CF, 6800 ohm
R325	24366132	CF, 1300 ohm
R327	24339229	MF, 2.2 ohm, 2W
R329	24366223	CF, 22k ohm
R334	24383561	OMF, 560 ohm, 2W (2563DN)
R334	24383751	OMF, 750 ohm, 2W (2863DN)
R336	24383271	OMF, 270 ohm, 2W
R340	24382391	OMF, 390 ohm, 1W
R341	24366182	CF, 1800 ohm
R342	24366562	CF, 5600 ohm
R343	24310109	MF, 1.0 ohm, 1/2W
R344	24366392	CF, 3900 ohm
R346	24366102	CF, 1k ohm
R347	24366392	CF, 3900 ohm
R348	24366103	CF, 10k ohm
R349	24366153	CF, 15k ohm
R362	24552682	OMF, 6800 ohm, 1/2W
R402	24366273	CF, 27k ohm
R403	24366272	CF, 2700 ohm
R404	24552472	OMF, 4700 ohm, 1/2W
R405	24366431	CF, 430 ohm
R406	24366221	CF, 220 ohm
R407	24366131	CF, 130 ohm
R408	24366562	CF, 5600 ohm
R409	24366204	CF, 200k ohm
R410	24552472	OMF, 4700 ohm, 1/2W
R411	24366561	CF, 560 ohm
R413	24366151	CF, 150 ohm
R415	24382272	OMF, 2700 ohm, 1W
R416	24510562	Cement, 5600 ohm, 5W
R421	24366104	CF, 100k ohm
R430	24366272	CF, 2700 ohm
R431	24366102	CF, 1k ohm
R432	24366473	CF, 47k ohm
R433	24366333	CF, 33k ohm
R434	24366123	CF, 12k ohm
R435	24366103	CF, 10k ohm
R436	24366272	CF, 2700 ohm
R437	24366103	CF, 10k ohm
R440	24366472	CF, 4700 ohm
R442	24382102	OMF, 1k ohm, 1W
R444	24338398	MF, 0.39 ohm, 1W
R446	24533151	FR, 150 ohm, 2W
R448	24338338	MF, 0.33 ohm, 1W
R452	24069547	VR, 5k ohm, 0.08W, CC
R470	24338568	MF, 0.56 ohm, 1W
R471	24552101	OMF, 100 ohm, 1/2W
R472	24376393	CF, 39k ohm, 1/2W
R474	24366331	CF, 330 ohm
R475	24366102	CF, 1k ohm
R477	24366153	CF, 15k ohm
R501	24366561	CF, 560 ohm
R502	24366334	CF, 330k ohm
R504	24366391	CF, 390 ohm
R507	24366822	CF, 8200 ohm
R508	24366561	CF, 560 ohm
R509	24366203	CF, 20k ohm
R511	24366202	CF, 2k ohm

Location No.	Part No.	Description
R512	24366182	CF, 1800 ohm
R513	24366122	CF, 1200 ohm
R514	24366562	CF, 5600 ohm
R515	24366681	CF, 680 ohm
R516	24366681	CF, 680 ohm
R517	24366681	CF, 680 ohm
R518	24366475	CF, 4.7M ohm
R520	24366102	CF, 1k ohm
R521	24366562	CF, 5600 ohm
R522	24366185	CF, 1.8M ohm
R527	24366154	CF, 150k ohm
R533	24366392	CF, 3900 ohm
R534	24366101	CF, 100 ohm
R535	24366391	CF, 390 ohm (2563DN)
R535	24366331	CF, 330 ohm (2863DN)
R536	24366103	CF, 10k ohm
R537	24366392	CF, 3900 ohm
R538	24366391	CF, 390 ohm (2563DN)
R538	24366331	CF, 330 ohm (2863DN)
R539	24366392	CF, 3900 ohm
R541	24366821	CF, 820 ohm
R542	24366201	CF, 200 ohm
R543	24366103	CF, 10k ohm
R544	24366101	CF, 100 ohm
R547	24366102	CF, 1k ohm
R548	24366102	CF, 1k ohm
R549	24366102	CF, 1k ohm
R551	24066955	VR, 1k ohm, 1/10W
R557	24066600	VR, 10k ohm, 1/10W
R558	24066600	VR, 10k ohm, 1/10W
R559	24066600	VR, 10k ohm, 1/10W
R565	24366560	CF, 56 ohm
R566	24366560	CF, 56 ohm
R567	24366560	CF, 56 ohm
R568	24366102	CF, 1k ohm
R570	24366272	CF, 2700 ohm
R571	24366272	CF, 2700 ohm
R572	24366272	CF, 2700 ohm
R580	24366271	CF, 270 ohm
R581	24366271	CF, 270 ohm (2563DN)
R581	24366221	CF, 220 ohm (2863DN)
R591	24383153	OMF, 15k ohm, 2W
R592	24383153	OMF, 15k ohm, 2W
R593	24383153	OMF, 15k ohm, 2W
R633	24366229	CF, 2.2 ohm
R634	24366229	CF, 2.2 ohm
R641	24366103	CF, 10k ohm
R642	24366101	CF, 100 ohm
R643	24552331	OMF, 330 ohm, 1/2W
R644	24552331	OMF, 330 ohm, 1/2W
R662	24366103	CF, 10k ohm
R666	24366103	CF, 10k ohm
R667	24366103	CF, 10k ohm
R668	24366103	CF, 10k ohm
R670	24366682	CF, 6800 ohm
R673	24366222	CF, 2200 ohm
R674	24366102	CF, 1k ohm
R675	24366222	CF, 2200 ohm
R681	24366682	CF, 6800 ohm
R687	24366103	CF, 10k ohm
R688	24366104	CF, 100k ohm
R689	24366103	CF, 10k ohm
△R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W

Location No.	Part No.	Description
R803	24382683	OMF, 68k ohm, 1W
R805	24366101	CF, 100 ohm
R810	24366122	CF, 1200 ohm
R812	24552103	OMF, 10k ohm, 1/2W
R813	24366272	CF, 2700 ohm
R815	24552102	OMF, 1k ohm, 1/2W
R816	24382180	OMF, 18 ohm, 1W
R817	24322278	MF, 0.27 ohm, 1W
R818	24321829	MF, 8.2 ohm, 1/2W
R819	24366472	CF, 4700 ohm
R820	24366101	CF, 100 ohm
R825	24366472	CF, 4700 ohm
R832	24321228	MF, 0.22 ohm, 1/2W
△R833	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R842	24366681	CF, 680 ohm
R843	24366821	CF, 820 ohm
R848	24552332	OMF, 3300 ohm, 1/2W
R860	24366681	CF, 680 ohm
R861	24366221	CF, 220 ohm
R863	24366102	CF, 1k ohm
R865	24366681	CF, 680 ohm
R866	24366471	CF, 470 ohm
R867	24366103	CF, 10k ohm
R868	24366472	CF, 4700 ohm
R870	24382223	OMF, 22k ohm, 1W
R872	24569339	Cement, 3.3 ohm, 10W
R878	24531560	FR, 56 ohm, 1/2W
R879	24366472	CF, 4700 ohm
R884	24531120	FR, 12 ohm, 1/2W
R890	24019340	PTC Thermistor, 18 ohm, 290V
R893	24366103	CF, 10k ohm
R901	24552272	OMF, 2700 ohm, 1/2W
R902	24552272	OMF, 2700 ohm, 1/2W
R903	24552272	OMF, 2700 ohm, 1/2W
R920	24000568	FR, 4.7 ohm, 1W
RA01	24366331	CF, 330 ohm
RA02	24366331	CF, 330 ohm
RA03	24366331	CF, 330 ohm
RA04	24366331	CF, 330 ohm
RA06	24366102	CF, 1k ohm
RA07	24366102	CF, 1k ohm
RA08	24366102	CF, 1k ohm
RA09	24366102	CF, 1k ohm
RA10	24366102	CF, 1k ohm
RA11	24366102	CF, 1k ohm
RA12	24366102	CF, 1k ohm
RA13	24366101	CF, 100 ohm
RA14	24366331	CF, 330 ohm
RA15	24366331	CF, 330 ohm
RA16	24366331	CF, 330 ohm
RA17	24366331	CF, 330 ohm
RA18	24366331	CF, 330 ohm
RA19	24366331	CF, 330 ohm
RA20	24366331	CF, 330 ohm
RA21	24366331	CF, 330 ohm
RA22	24366472	CF, 4700 ohm
RA23	24366472	CF, 4700 ohm
RA26	24366273	CF, 27k ohm
RA27	24366102	CF, 1k ohm
RA29	24366102	CF, 1k ohm
RA30	24366821	CF, 820 ohm
RA31	24366102	CF, 1k ohm

Location No.	Part No.	Description
RA32	24366331	CF, 330 ohm
RA33	24366331	CF, 330 ohm
RA34	24366331	CF, 330 ohm
RA35	24366272	CF, 2700 ohm
RA36	24366102	CF, 1k ohm
RA37	24366102	CF, 1k ohm
RA43	24366102	CF, 1k ohm
RA44	24366103	CF, 10k ohm
RA45	24366102	CF, 1k ohm
RA46	24366102	CF, 1k ohm
RA47	24366473	CF, 47k ohm
RA48	24366102	CF, 1k ohm
RA49	24366331	CF, 330 ohm
RA50	24366331	CF, 330 ohm
RA51	24366101	CF, 100 ohm
RA52	24366101	CF, 100 ohm
RA56	24366472	CF, 4700 ohm
RA60	24366472	CF, 4700 ohm
RA61	24366472	CF, 4700 ohm
RA62	24366472	CF, 4700 ohm
RA63	24366472	CF, 4700 ohm
RA68	24366470	CF, 47 ohm
RA69	24366472	CF, 4700 ohm
RA70	24366103	CF, 10k ohm
RA75	24366103	CF, 10k ohm
RA80	24366103	CF, 10k ohm
RA81	24366103	CF, 10k ohm
RA84	24366472	CF, 4700 ohm
RA85	24366472	CF, 4700 ohm
RA86	24366472	CF, 4700 ohm
RA87	24366472	CF, 4700 ohm
RA88	24366472	CF, 4700 ohm
RA89	24366103	CF, 10k ohm
RA96	24366271	CF, 270 ohm
RA97	24366332	CF, 3300 ohm
RA98	24366682	CF, 6800 ohm
RA99	24366203	CF, 20k ohm
RB01	24366271	CF, 270 ohm
RB02	24366332	CF, 3300 ohm
RB03	24366103	CF, 10k ohm
RB04	24366103	CF, 10k ohm
RB07	24366103	CF, 10k ohm
RB09	24366470	CF, 47 ohm
RB10	24366182	CF, 1800 ohm
RB11	24366471	CF, 470 ohm
RB12	24366333	CF, 33k ohm
RB13	24366564	CF, 560k ohm
RB14	24366123	CF, 12k ohm
RB15	24366392	CF, 3900 ohm
RB16	24366392	CF, 3900 ohm
RB17	24366472	CF, 4700 ohm
RB18	24366103	CF, 10k ohm
RB19	24366223	CF, 22k ohm
RB33	24366103	CF, 10k ohm
RB51	24366101	CF, 100 ohm
RB52	24366101	CF, 100 ohm
RD01	24000211	FR, 15 ohm, 1/2W
RD02	24323229	MF, 2.2 ohm, 2W
RD03	24366562	CF, 5600 ohm
RD04	24552102	OMF, 1k ohm, 1/2W
RD05	24552332	OMF, 3300 ohm, 1/2W
RD06	24366242	CF, 2400 ohm
RD07	24366273	CF, 27k ohm
RD08	24366114	CF, 110k ohm

Location No.	Part No.	Description
RD09	24366153	CF, 15k ohm
RD10	24366153	CF, 15k ohm
RE01	24366101	CF, 100 ohm
RE02	24366820	CF, 82 ohm
RE03	24366562	CF, 5600 ohm
RE04	24366221	CF, 220 ohm
RE05	24366220	CF, 22 ohm
RE06	24366681	CF, 680 ohm
RE07	24366162	CF, 1600 ohm
RE09	24366102	CF, 1k ohm
RE10	24366332	CF, 3300 ohm
RE11	24366221	CF, 220 ohm
RE13	24366332	CF, 3300 ohm
RE14	24366222	CF, 2200 ohm
RE15	24366393	CF, 39k ohm
RE16	24366273	CF, 27k ohm
RE17	24366474	CF, 470k ohm
RE18	24366153	CF, 15k ohm
RE19	24366103	CF, 10k ohm
RE20	24366101	CF, 100 ohm
RE21	24366123	CF, 12k ohm
RE22	24366564	CF, 560k ohm
RE23	24366474	CF, 470k ohm
RE30	24366333	CF, 33k ohm
RE31	24366563	CF, 56k ohm
RE32	24366183	CF, 18k ohm
RE33	24366102	CF, 1k ohm
RE34	24366102	CF, 1k ohm
RF20	24366102	CF, 1k ohm
RF21	24366102	CF, 1k ohm
RF22	24366101	CF, 100 ohm
RF23	24366102	CF, 1k ohm
RG60	24366472	CF, 4700 ohm
RG61	24366472	CF, 4700 ohm
RG62	24366392	CF, 3900 ohm
RG63	24366392	CF, 3900 ohm
RG64	24366101	CF, 100 ohm
RG65	24366101	CF, 100 ohm
RG66	24366101	CF, 100 ohm
RG67	24366101	CF, 100 ohm
RG68	24366474	CF, 470k ohm
RM26	24366153	CF, 15k ohm
RN01	24366101	CF, 100 ohm
RN02	24366152	CF, 1500 ohm
RN08	24366103	CF, 10k ohm
RN11	24366103	CF, 10k ohm
RN12	24366122	CF, 1200 ohm
RN13	24366103	CF, 10k ohm
RN21	24366473	CF, 47k ohm
RN22	24366473	CF, 47k ohm
RN24	24366332	CF, 3300 ohm
RN34	24366104	CF, 100k ohm
RN35	24366561	CF, 560 ohm
RV01	24366101	CF, 100 ohm
RV02	24366102	CF, 1k ohm
RV03	24366472	CF, 4700 ohm
RV04	24366472	CF, 4700 ohm
RV06	24366102	CF, 1k ohm
RV08	24366102	CF, 1k ohm
RV10	24366101	CF, 100 ohm
RV11	24366472	CF, 4700 ohm
RV12	24366472	CF, 4700 ohm
RV13	24366101	CF, 100 ohm
RV16	24366104	CF, 100k ohm

Location No.	Part No.	Description
RV17	24366223	CF, 22k ohm
RV18	24366473	CF, 47k ohm
RV21	24366101	CF, 100 ohm
RV22	24366101	CF, 100 ohm
RV23	24366561	CF, 560 ohm
RV24	24552331	OMF, 330 ohm, 1/2W
RV25	24019261	FR, 47 ohm, $\pm 2\%$, 1/4W
RV26	24366222	CF, 2200 ohm
RV27	24366104	CF, 100k ohm
RV28	24366104	CF, 100k ohm
RV29	24366271	CF, 270 ohm
RV30	24366152	CF, 1500 ohm
RV34	24366151	CF, 150 ohm
RV36	24366750	CF, 75 ohm
RV37	24366104	CF, 100k ohm
RV38	24366104	CF, 100k ohm
RV39	24366750	CF, 75 ohm
RV40	24366750	CF, 75 ohm
RV41	24366103	CF, 10k ohm
RV42	24366750	CF, 75 ohm
RV43	24366620	CF, 62 ohm
RV44	24366620	CF, 62 ohm
RV45	24366620	CF, 62 ohm
RV47	24366101	CF, 100 ohm
RV49	24366102	CF, 1k ohm
RV60	24552391	OMF, 390 ohm, 1/2W
RV61	24366130	CF, 13 ohm
RV62	24366130	CF, 13 ohm
RV63	24366130	CF, 13 ohm
RV64	24366104	CF, 100k ohm
RV65	24366104	CF, 100k ohm
RV66	24366104	CF, 100k ohm
RV67	24366104	CF, 100k ohm
RV68	24366123	CF, 12k ohm
RV69	24366822	CF, 8200 ohm
RV71	24366750	CF, 75 ohm
RV72	24366103	CF, 10k ohm
RV73	24366750	CF, 75 ohm
RV74	24366472	CF, 4700 ohm
RV75	24366472	CF, 4700 ohm
RV76	24366101	CF, 100 ohm
RV77	24366152	CF, 1500 ohm
RV78	24366103	CF, 10k ohm
RV79	24366750	CF, 75 ohm
RV83	24366123	CF, 12k ohm
RV84	24366822	CF, 8200 ohm
RV91	24366102	CF, 1k ohm
RW25	24366221	CF, 220 ohm
RW26	24366221	CF, 220 ohm
RX01	24366102	CF, 1k ohm
RX02	24366101	CF, 100 ohm
RX03	24366101	CF, 100 ohm
RX10	24366101	CF, 100 ohm
RX12	24366102	CF, 1k ohm
RX13	24366332	CF, 3300 ohm
RX14	24366103	CF, 10k ohm
RX15	24366473	CF, 47k ohm
RX19	24366562	CF, 5600 ohm
RX20	24366152	CF, 1500 ohm
RX21	24366562	CF, 5600 ohm
RX22	24366562	CF, 5600 ohm
RX27	24366102	CF, 1k ohm

COILS & TRANSFORMERS

Location No.	Part No.	Description
L202	23289270	Coil, Peaking, TRF4270AF
L301	23103859	Coil (Ferrite Bead), TEM2011
L302	23289101	Coil, Peaking, TRF4101AF
L315	23238714	Coil, Peaking, TRF4100AJ
L405	23221685	Coil, Choke, TLN3193
L412	23221684	Coil, Choke, TLN3191D
L414	23103859	Coil (Ferrite Bead), TEM2011
L421	23248116	Coil, Choke, TLN3368D
L422	23248117	Coil, Choke, TLN3382D
L441	23233947	Coil, Linearity, TLN2144G
L503	23238714	Coil, Peaking, TRF4100AJ
L551	23250972	Coil, 1H-Delay Matching, TRF5418D
L590	23289100	Coil, Peaking, TRF4100AF
L643	23103859	Coil (Ferrite Bead), TEM2011
L810	23103859	Coil (Ferrite Bead), TEM2011
L811	23103859	Coil (Ferrite Bead), TEM2011
L821	23280016	Coil, Peaking, TRF4100AZ
L823	23221747	Coil, Choke, TRF9253D
L826	23248073	Coil, Choke, TLN3299D
L829	23103859	Coil (Ferrite Bead), TEM2011
L842	23103859	Coil (Ferrite Bead), TEM2011
L866	23289229	Coil, Peaking, TRF42R2AF
L880	23280016	Coil, Peaking, TRF4100AZ
△ L901	23200276	Coil, Degaussing, TSB-2330BR (2863DN)
△ L901	23200275	Coil, Degaussing, TSB-2329BR (2563DN)
LA12	23221803	Coil, Choke, TLN3040D
LA38	23103859	Coil (Ferrite Bead), TEM2011
LA39	23103859	Coil (Ferrite Bead), TEM2011
LA44	23103859	Coil (Ferrite Bead), TEM2011
LA45	23289109	Coil, Peaking, TRF41R0AF
LC02	23238562	Coil, Peaking, TRF4109AJ
LC03	23238562	Coil, Peaking, TRF4109AJ
LD02	23221896	Coil, Choke, TLN3061
LN01	23238713	Coil, Peaking, TRF4120AJ
LN03	23238710	Coil, Peaking, TRF4220AJ
LV01	23289220	Coil, Peaking, TRF4220AF
LV03	23289270	Coil, Peaking, TRF4270AF
T401	23224336	Transformer, Horiz. Drive, TLN1083
△ T461	23236454	Transformer, Flyback, TFB4117AR
T801	23211670	Line Filter, TRF3164G
△ T803	23217214	Transformer, Converter, TPW3283AR
SEMICONDUCTORS		
Q205	23114454	Transistor, DTC144E-S
Q207	A6002010	Transistor, RN1201
Q208	A6317440	Transistor, 2SC1815-Y
Q213	A6317440	Transistor, 2SC1815-Y
Q240	A6002020	Transistor, RN1202
Q261	A6534053	Transistor, 2SA1015-Y(TE)
Q301	B0378560	IC, TA8427K
Q302	B0384683	IC, TA8859AP
Q340	A6534053	Transistor, 2SA1015-Y(TE)
Q341	A6317440	Transistor, 2SC1815-Y
Q342	A6002020	Transistor, RN1202
Q402	A678971D	Transistor, 2SC1569 FA-5
Q404	A6872801	Transistor, 2SD2253(FA)
Q408	23905815	IC, UPC2412AHF
Q430	A6317440	Transistor, 2SC1815-Y

Location No.	Part No.	Description
Q431	A6002060	Transistor, RN1206
Q432	A6534053	Transistor, 2SA1015-Y(TE)
Q470	A6547250	Transistor, 2SA1320
Q501	B0384303	IC, TA8808BN
Q505	A6363200	Transistor, 2SC3619
Q506	A6317440	Transistor, 2SC1815-Y
Q507	A6363200	Transistor, 2SC3619
Q508	A6317440	Transistor, 2SC1815-Y
Q509	A6363200	Transistor, 2SC3619
Q510	A6317440	Transistor, 2SC1815-Y
Q514	A6509127	Transistor, 2SA562TM-O(T
Q516	A6321265	Transistor, 2SC2120-Y(TE)
Q604	A6534053	Transistor, 2SA1015-Y(TE)
Q605	B0376856	IC, TA8211AH
Q608	A6010040	Transistor, RN2004
Q621	A6342206	Transistor, 2SC2878-A(TE)
Q622	A6342206	Transistor, 2SC2878-A(TE)
Q671	A6342206	Transistor, 2SC2878-A(TE)
Q673	A6342206	Transistor, 2SC2878-A(TE)
Q801	23904247	IC, STR-S6708
Q802	23314141	Transistor, 2SC3852
△ Q826	A8645166	Photo Coupler, TLP721F(D4-G
Q827	A6907751	IC, S1854
Q828	A6317440	Transistor, 2SC1815-Y
Q831	A6317440	Transistor, 2SC1815-Y
Q835	23318299	IC, L78MR05
Q836	A6534053	Transistor, 2SA1015-Y(TE)
Q861	23314141	Transistor, 2SC3852
Q870	A6333346	Transistor, 2SC2655-Y(C)
Q871	A6317440	Transistor, 2SC1815-Y
Q890	23314141	Transistor, 2SC3852
QA01	23905782	IC, SAA5296ZP028
QA02	23904665	IC, NM24C04EN
QB01	A6317440	Transistor, 2SC1815-Y
QB10	A6534053	Transistor, 2SA1015-Y(TE)
QB11	A6317440	Transistor, 2SC1815-Y
QB12	A6534053	Transistor, 2SA1015-Y(TE)
QB33	A6317440	Transistor, 2SC1815-Y
QD01	A6625365	Transistor, 2SB688-O(BS)
QD02	A6317440	Transistor, 2SC1815-Y
QD03	A6317440	Transistor, 2SC1815-Y
QE01	A6534053	Transistor, 2SA1015-Y(TE)
QE02	23318244	IC, CX20125
QE03	A6534053	Transistor, 2SA1015-Y(TE)
QE04	A6317440	Transistor, 2SC1815-Y
QE05	A6534053	Transistor, 2SA1015-Y(TE)
QE30	A6317440	Transistor, 2SC1815-Y
QE31	A6317440	Transistor, 2SC1815-Y
QE32	A6317440	Transistor, 2SC1815-Y
QE33	A6734585	Transistor, 2SC752(G)TM-O
QF06	A6317440	Transistor, 2SC1815-Y
QG60	23905560	IC, M62420SP
QN02	A6534053	Transistor, 2SA1015-Y(TE)
QN03	A6534053	Transistor, 2SA1015-Y(TE)
QN08	A6317440	Transistor, 2SC1815-Y
QN15	A6002060	Transistor, RN1206
QN21	A6000020	Transistor, RN1002
QV01	B0383720	IC, TA8747N
QV03	A6342206	Transistor, 2SC2878-A(TE)
QV04	A6534053	Transistor, 2SA1015-Y(TE)
QV05	A6534053	Transistor, 2SA1015-Y(TE)
QV06	A6534053	Transistor, 2SA1015-Y(TE)
QV07	A6317440	Transistor, 2SC1815-Y
QX01	23119139	IC, AN5862K

Location No.	Part No.	Description
QX10	A6317440	Transistor, 2SC1815-Y
QY09	A6000020	Transistor, RN1002
D108	23316756	Diode, Zener, MTZJ33D
D201	23115599	Diode, 1N4148
D202	23115599	Diode, 1N4148
D203	23115599	Diode, 1N4148
D204	23115599	Diode, 1N4148
D205	23115599	Diode, 1N4148
D301	23118479	Diode, BYD33J
D302	23118479	Diode, BYD33J
D303	23115599	Diode, 1N4148
D304	23115599	Diode, 1N4148
D320	23118822	Diode, ERB12-02
D321	23118822	Diode, ERB12-02
D332	23316794	Diode, SC570A
D340	23316666	Diode, Zener, MTZJ4.7B
D401	23316719	Diode, Zener, MTZJ12B
D402	23316734	Diode, Zener, MTZJ20B
D403	23316719	Diode, Zener, MTZJ12B
D406	23118479	Diode, BYD33J
D408	23118052	Diode, RU4Z
D410	23316684	Diode, Zener, MTZJ8.2B
D471	A7801205	SCR, SF0R3G42
D474	23316728	Diode, Zener, MTZJ16B
D475	23316719	Diode, Zener, MTZJ12B
D590	23115599	Diode, 1N4148
D591	23115599	Diode, 1N4148
D592	23115599	Diode, 1N4148
D594	23115599	Diode, 1N4148
D595	23115599	Diode, 1N4148
D596	23115599	Diode, 1N4148
D601	23115599	Diode, 1N4148
D636	23115599	Diode, 1N4148
D637	23115599	Diode, 1N4148
D638	23115599	Diode, 1N4148
D639	23115599	Diode, 1N4148
D640	23115599	Diode, 1N4148
D641	23115599	Diode, 1N4148
D801	23316391	Diode, D3SB60, 4109
D802	23118479	Diode, BYD33J
D803	23118479	Diode, BYD33J
D804	23316678	Diode, Zener, MTZJ6.8B
D805	23115599	Diode, 1N4148
D806	23118479	Diode, BYD33J
D807	23118479	Diode, BYD33J
D808	23118479	Diode, BYD33J
D809	23316672	Diode, Zener, MTZJ5.6B
D810	23115599	Diode, 1N4148
D811	23115599	Diode, 1N4148
D812	23115599	Diode, 1N4148
D813	23118479	Diode, BYD33J
D814	23115599	Diode, 1N4148
D815	23316725	Diode, Zener, MTZJ15B
D816	23316674	Diode, Zener, MTZJ6.2A
D825	23115599	Diode, 1N4148
D826	23115599	Diode, 1N4148
D830	23118052	Diode, RU4Z
D831	23118052	Diode, RU4Z
D832	23118451	Diode, RU-4A
D844	23316718	Diode, Zener, MTZJ12A
D848	23316666	Diode, Zener, MTZJ4.7B
D861	23316672	Diode, Zener, MTZJ5.6B
D862	23316690	Diode, Zener, MTZJ10B
D874	23316670	Diode, Zener, MTZJ5.1C

Location No.	Part No.	Description
D875	23115599	Diode, 1N4148
D878	23316671	Diode, Zener, MTZJ5.6A
DA02	23115599	Diode, 1N4148
DA03	23115599	Diode, 1N4148
DA04	23115599	Diode, 1N4148
DA07	23115599	Diode, 1N4148
DA10	23115599	Diode, 1N4148
DA11	23115599	Diode, 1N4148
DA16	23115599	Diode, 1N4148
DA17	23115599	Diode, 1N4148
DA44	23316675	Diode, Zener, MTZJ6.2B
DB01	23358504	LED, Red, SCL003URC3FX
DD01	23118479	Diode, BYD33J
DD02	23316582	Diode, ERC20-06
DD03	23118479	Diode, BYD33J
DD04	23115599	Diode, 1N4148
DD05	23316718	Diode, Zener, MTZJ12A
DD06	23316672	Diode, Zener, MTZJ5.6B
DD07	23316672	Diode, Zener, MTZJ5.6B
DE01	23115599	Diode, 1N4148
DE02	23115599	Diode, 1N4148
DE03	23115599	Diode, 1N4148
DE30	23316681	Diode, Zener, MTZJ7.5B
DV01	23316690	Diode, Zener, MTZJ10B
DV03	23316690	Diode, Zener, MTZJ10B
DV07	23316690	Diode, Zener, MTZJ10B
DV08	23316687	Diode, Zener, MTZJ9.1B
DV40	23115599	Diode, 1N4148
DV44	23316666	Diode, Zener, MTZJ4.7B
DX03	23115599	Diode, 1N4148
DX04	23115599	Diode, 1N4148
DX05	23115599	Diode, 1N4148
DX06	23115599	Diode, 1N4148
DX07	23115599	Diode, 1N4148
DX08	23115599	Diode, 1N4148
DX09	23115599	Diode, 1N4148
DX10	23115599	Diode, 1N4148
DX11	23115599	Diode, 1N4148
DX12	23316666	Diode, Zener, MTZJ4.7B
DX13	23115599	Diode, 1N4148

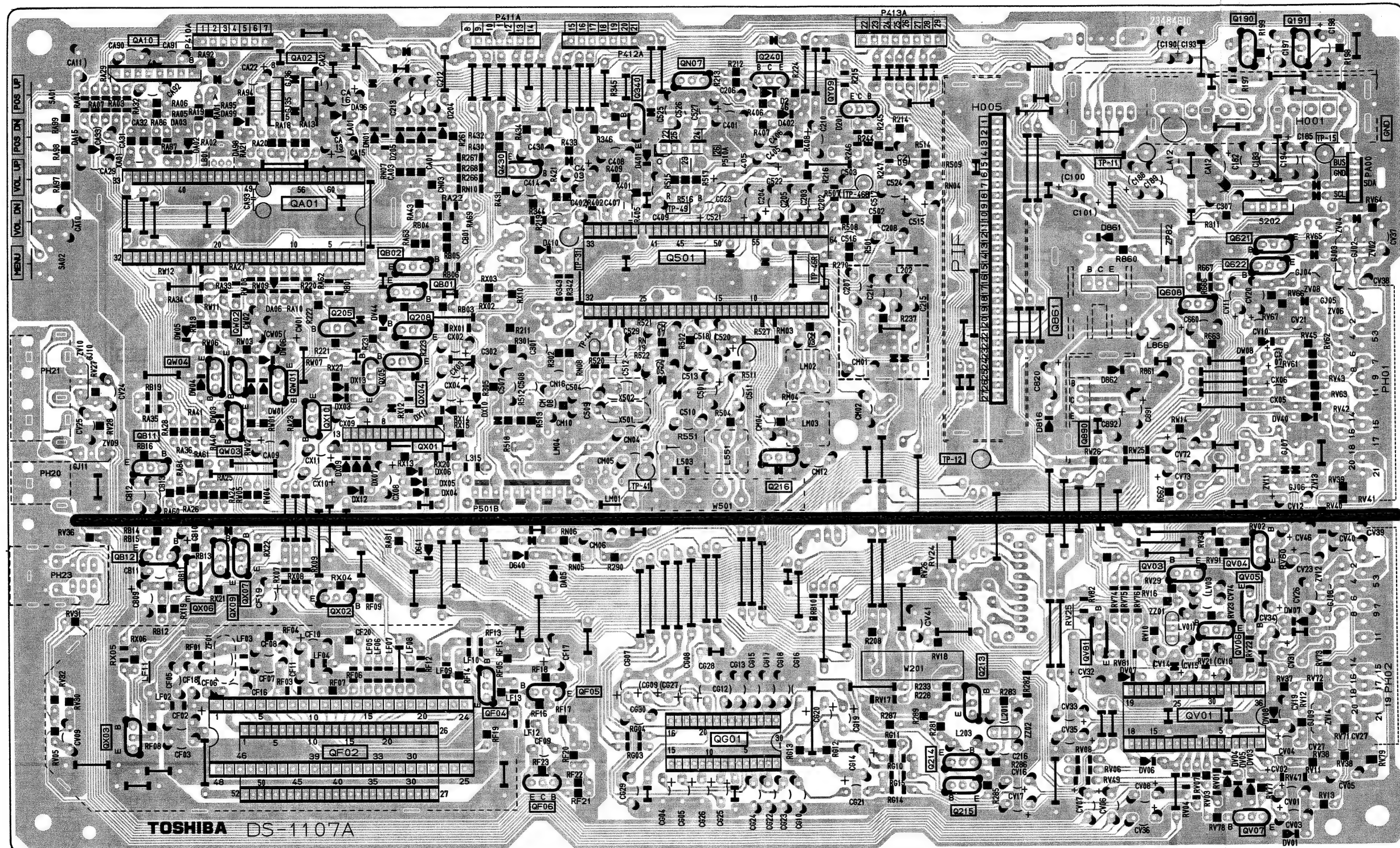
MISCELLANEOUS		
△ F801	23144473	Fuse, 5.0A
F801A	23165433	Holder, Fuse
△ F803	23144502	Fuse, 1.0A
F803A	23165433	Holder, Fuse
G102	23289109	Coil, Peaking, TRF41R0AF
G103	23289109	Coil, Peaking, TRF41R0AF
G105	23289109	Coil, Peaking, TRF41R0AF
G106	23289109	Coil, Peaking, TRF41R0AF
G108	23289109	Coil, Peaking, TRF41R0AF
G109	23289109	Coil, Peaking, TRF41R0AF
G343	24366103	CF, 10k ohm
G591	23289100	Coil, Peaking, TRF4100AF
GA32	23115599	Diode, 1N4148
GA33	23115599	Diode, 1N4148
GA34	23115599	Diode, 1N4148
GV84	24366681	CF, 680 ohm
GV85	24366681	CF, 680 ohm
GV86	24366681	CF, 680 ohm
GV87	24366681	CF, 680 ohm
GV88	24366681	CF, 680 ohm
GV89	24366681	CF, 680 ohm

Location No.	Part No.	Description
H005	23148270	Module, MVGS46A, IGR/NICAM
KB01	23904946	Remote Sensor, RPM-676CBR-S
P681	23363607	Headphone Jack, 3.5mm
△P801	23372014	Power Cord
PH01	23365598	Connector, 21Pin
PH02	23365598	Connector, 21Pin
PH20	23363252	Pin Jack, Yellow
PH21	23365508	Jack, Phono
S202	23344333	Switch, Lever, 1C3P
△S801	23344395	Switch, Power
SA01	23145430	Switch, Push, 1C1P
SA02	23145430	Switch, Push, 1C1P
SA03	23145430	Switch, Push, 1C1P
SA04	23145430	Switch, Push, 1C1P
SA05	23145430	Switch, Push, 1C1P
△V901A	23902891	Socket, CRT, 10P
W202	23250118	Delay Line, TRF2081T
W501	23250949	Delay Line, PAL Chroma, DL701
W661	23351116	Speaker, SPK-1382, 60x120mm, 8 ohm
W662	23351116	Speaker, SPK-1382, 60x120mm, 8 ohm
X401	23153721	Ceramic Resonator, 503kHz, TCR1023
X501	23153979	Crystal, 4.43MHz
XA01	23153930	Crystal, 12.0MHz
XE01	23250861	Delay Line, TRF2093
△ZP81	23144543	Protector, PRF50005491, 125V, 5A
△ZP82	23144536	Protector, PRF10005491, 125V, 1A
ZZ01	23303056	Ceramic Trap, TCF1085, 4.43M
PC BOARD ASSEMBLIES		
*U901	23705626	CRT Drive Board, PB6337Y (2563DN)
*U901	23705359	CRT Drive Board, PB6337X (2863DN)
*U902A	23705959	Signal Board, PB6338J-1 (2563DN)
*U902A	23705960	Signal Board, PB6338D-1 (2863DN)
*U902B	23705961	CHROMA Board, PB6338J-2 (2563DN)
*U902B	23705962	CHROMA Board, PB6338D-2 (2863DN)
*U902C	23705963	LTI Board, PB6338J-3, (2563DN)
*U902C	23705964	LTI Board, PB6338D-3 (2863DN)
*U903	23705965	Power/Def/Audio Board, PB6339J, (2563DN)
*U903	23705974	Power/Def/Audio Board, PB6339D (2863DN)
PICTURE TUBE		
△V901	23312697	Picture Tube, A59ECF20X17 (2563DN)
△V901	23312696	Picture Tube, A66ECF20X17 (2863DN)

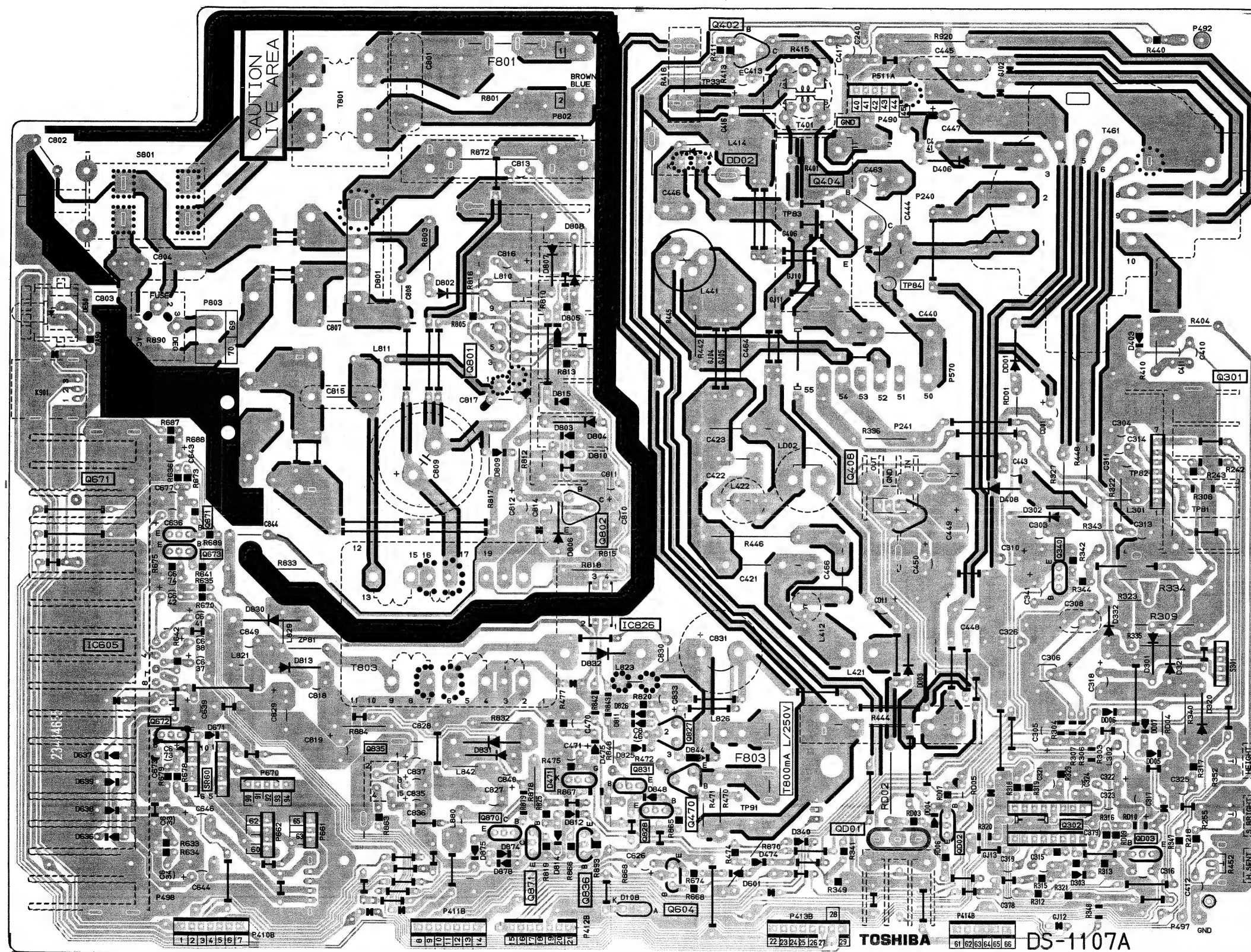
Location No.	Part No.	Description
TUNER		
H001	23321227	Tuner, EGA12LX1
ACCESSORIES		
K902	23306168	Remote Hand Unit, CT-9859
AT03	23588016	Battery Cover
Y101	23562877	Owner's Manual, English, 2563DN/2863DN
Y102	23562879	Owner's Manual, Finnish, 2563DN/2863DN
Y103	23562881	Owner's Manual, Norwegian, 2563DN/2863DN
Y104	23562883	Owner's Manual, Polish, 2563DN/2863DN

THIS PAGE IS
INTENTIONALLY LEFT
BLANK.

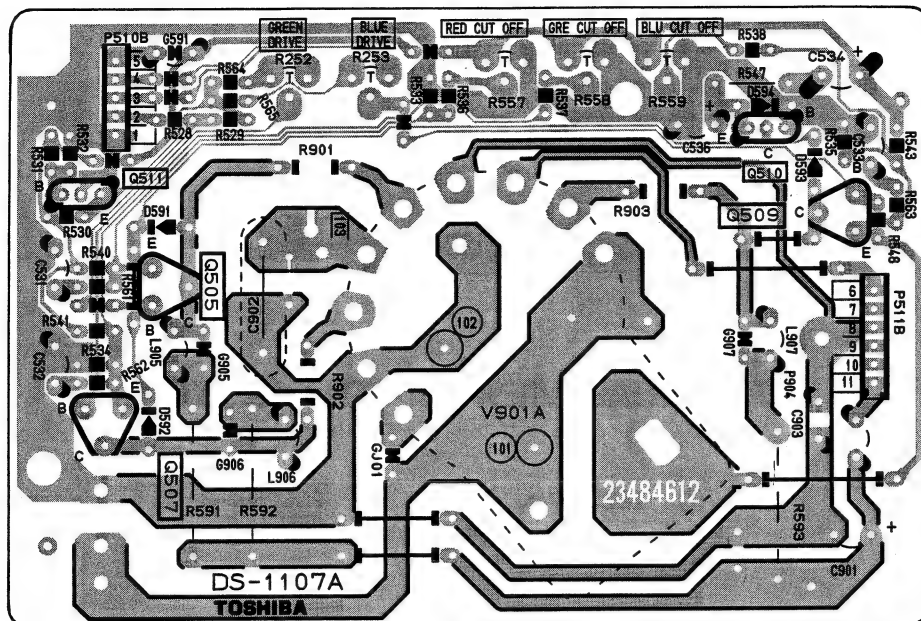
SIGNAL BOARD PB6338J-1 (2563DN)
PB6338D-1 (2863DN)
BOTTOM (FOIL) SIDE



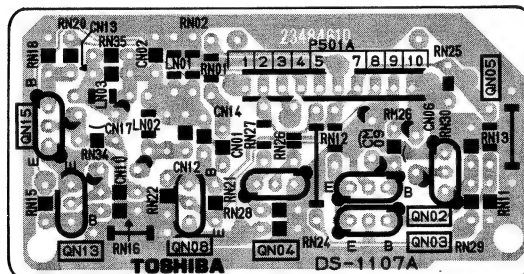
POWER/DEF/AUDIO BOARD PB6339J (2563DN)
PB6339D (2863DN)
BOTTOM (FOIL) SIDE



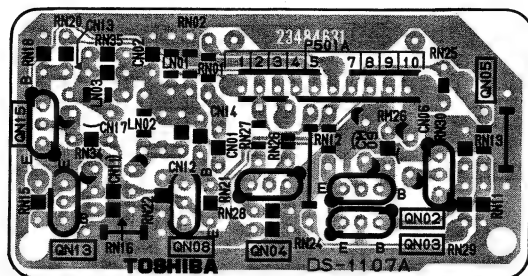
**CRT DRIVE BOARD PB6337Y (2563DN)
PB6337X (2863DN)**
BOTTOM (FOIL) SIDE



**CHROMA BOARD PB6338J-2 (2563DN)
PB6338D-2 (2863DN)**
BOTTOM (FOIL) SIDE

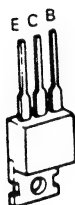


**LTI BOARD PB6338J-3 (2563DN)
PB6338D-3 (2863DN)**
BOTTOM (FOIL) SIDE

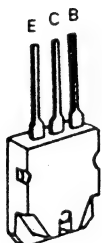


TERMINAL VIEW OF TRANSISTORS

① 2SC1569



② 2SC3927(A)



③ 2SC2580-C
2SC2655



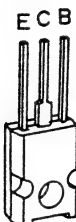
④ 2SA933S
2SA1015-Y
2SA1320-Y
2SC752GTM
2SC1685-Q
2SC1740S
2SC1815-N
2SC1959-Y
2SC2120-Y
2SC2878-A



⑤ 2SB1186A
2SC3852
2SD2253



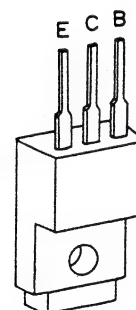
⑥ 2SC3619



⑦ RN1203
RN1204
RN1206
RN2004



⑧ 2SB1186A
2SD1763A



[illegible]

[illegible]

SCHEMATIC DIAGRAM MODEL: 2863DN (1/2)

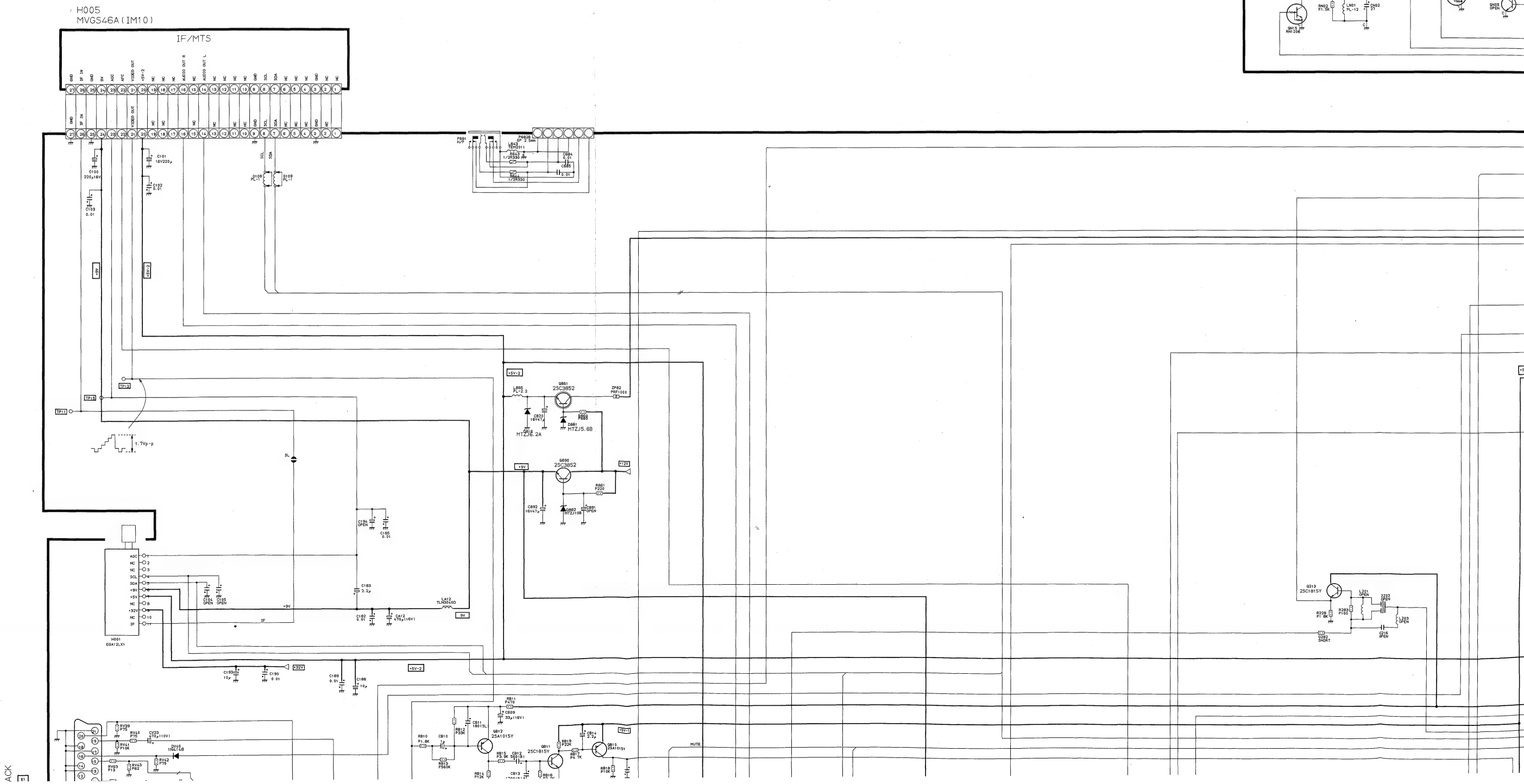
CAUTION: The international hazard symbols "△" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2. Do not degrade the safety of the receiver through improper servicing.

OBSERVATION OF VOLTAGES AND WAVEFORMS

- 1. Voltages read with VTVM from point shown to chassis ground, line voltage 220 volts, colour bar signal. Voltages reading may vary $\pm 20\%$.
- 2. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 3. Waveforms are taken using a standard colour bar signal.
- 4. Make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position. Set other controls for best picture.

NOTES:

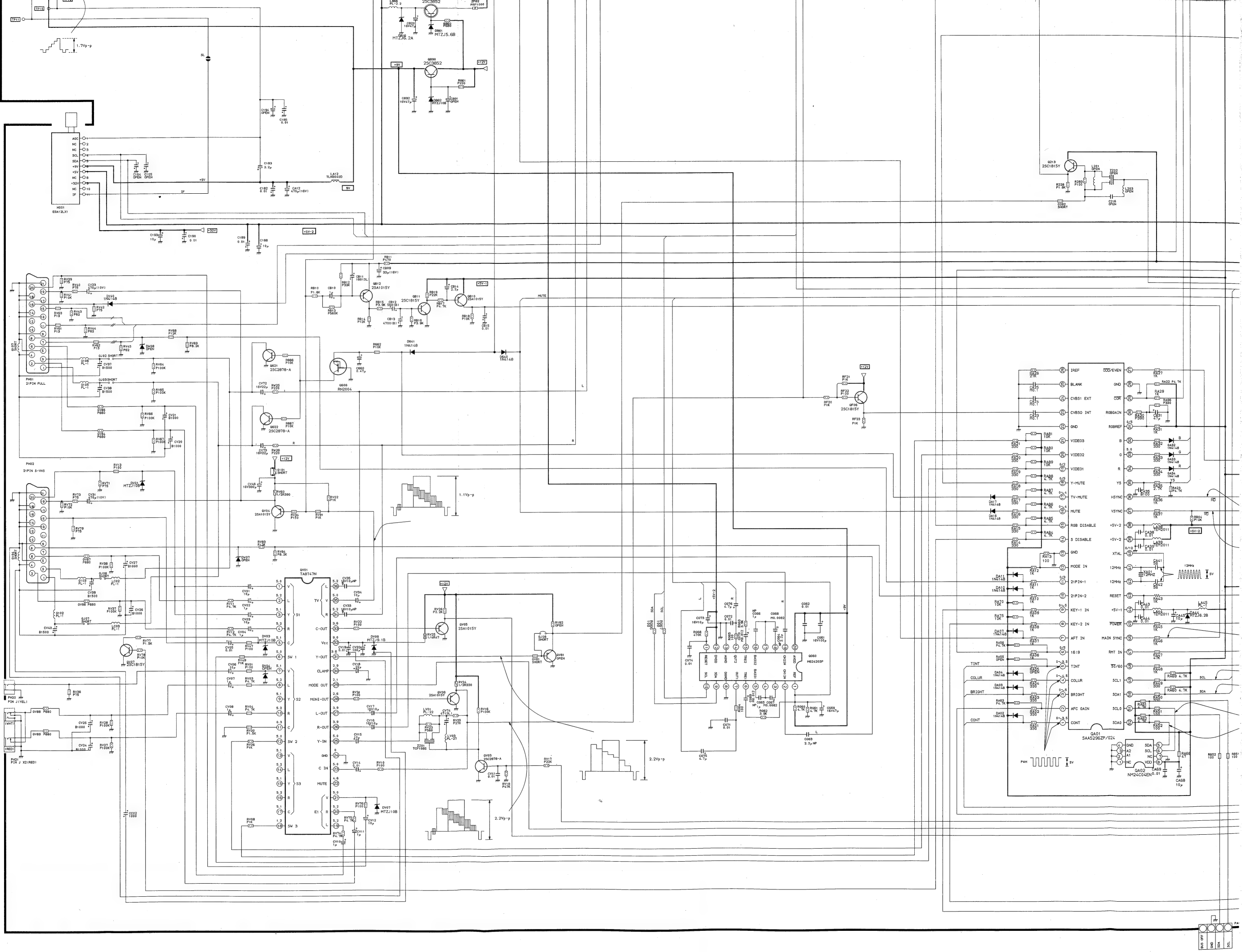
- 1. D.C. resistance value of a principal transform. These are measured for separated from the circuit.
- 2. The circuits are subject to change without notice.
- 3. ● : Solder links.

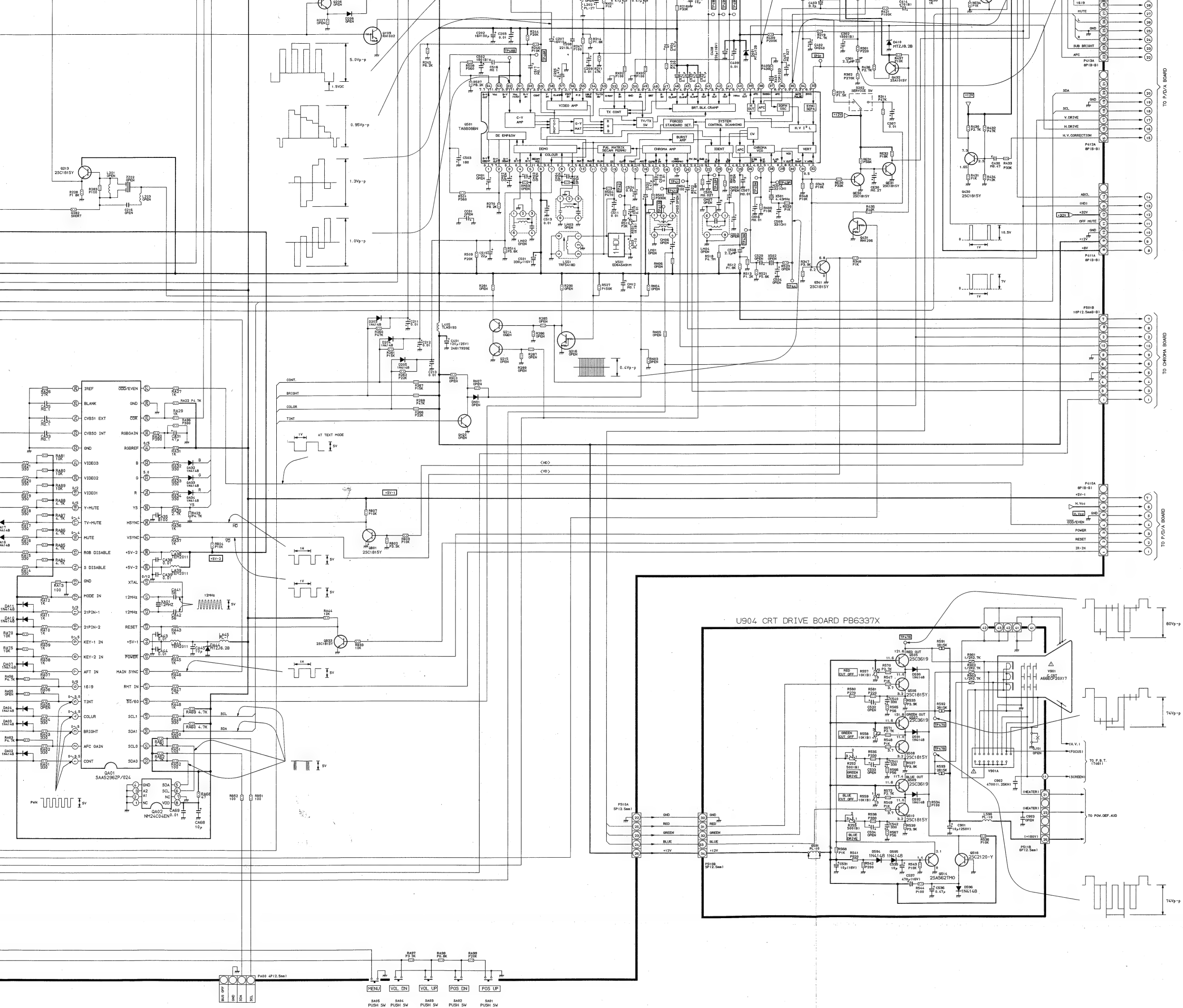


- 21 SHIELD EARTH
20 VIDEO IN
19 VIDEO OUT
18 RAPID BLK. EARTH
17 VIDEO EARTH
16 RAPID BLANKING
15 RED IN
14 EARTH
13 RED EARTH
12 NC
11 GREEN IN
10 NC
9 GREEN EARTH
8 EXT. TV
7 BLUE IN
6 AUDIO IN (L)
5 EARTH
4 AUDIO EARTH
3 AUDIO IN (R)
2 AUDIO IN (L)
1 AUDIO OUT (R)

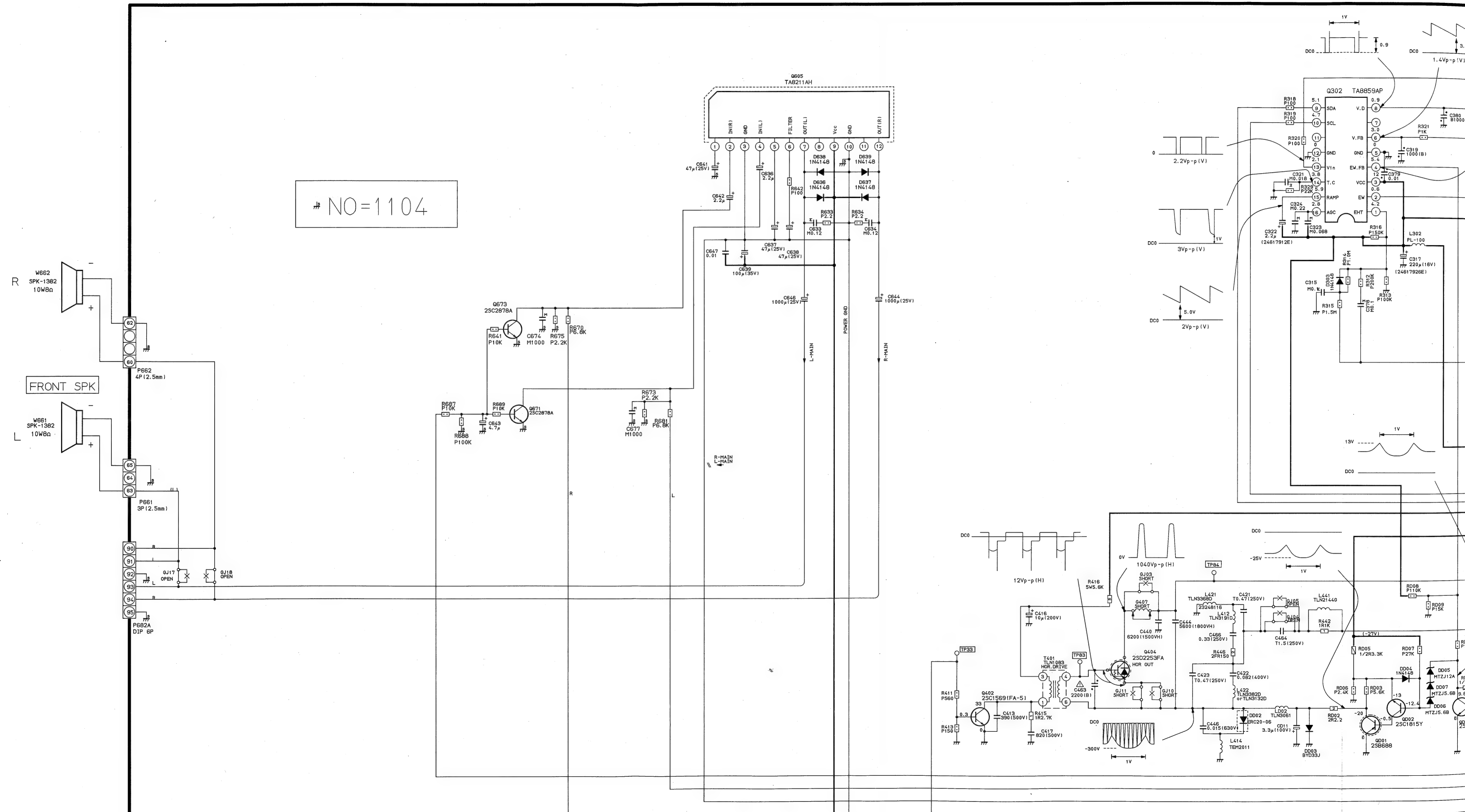
BACK

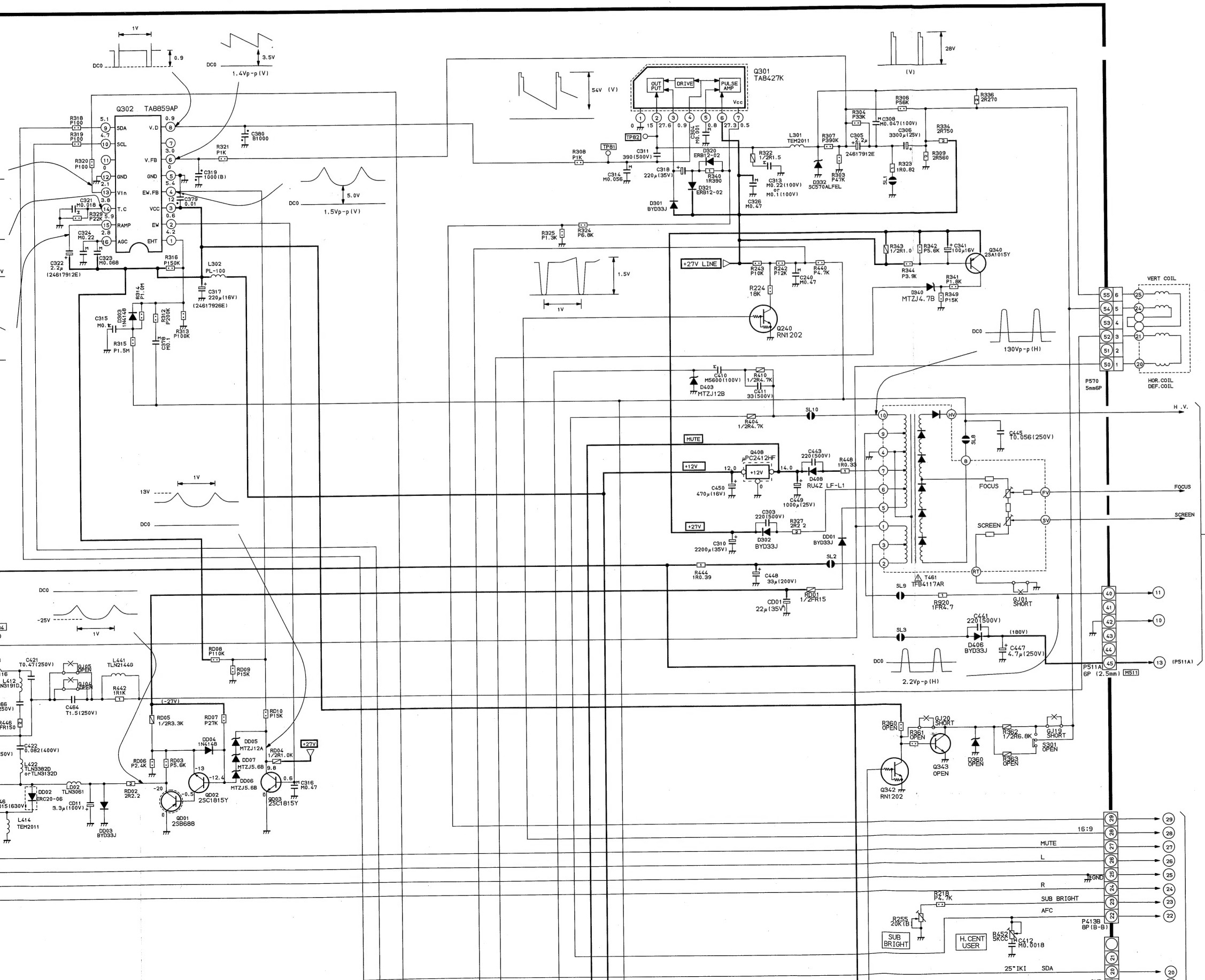
FRONT



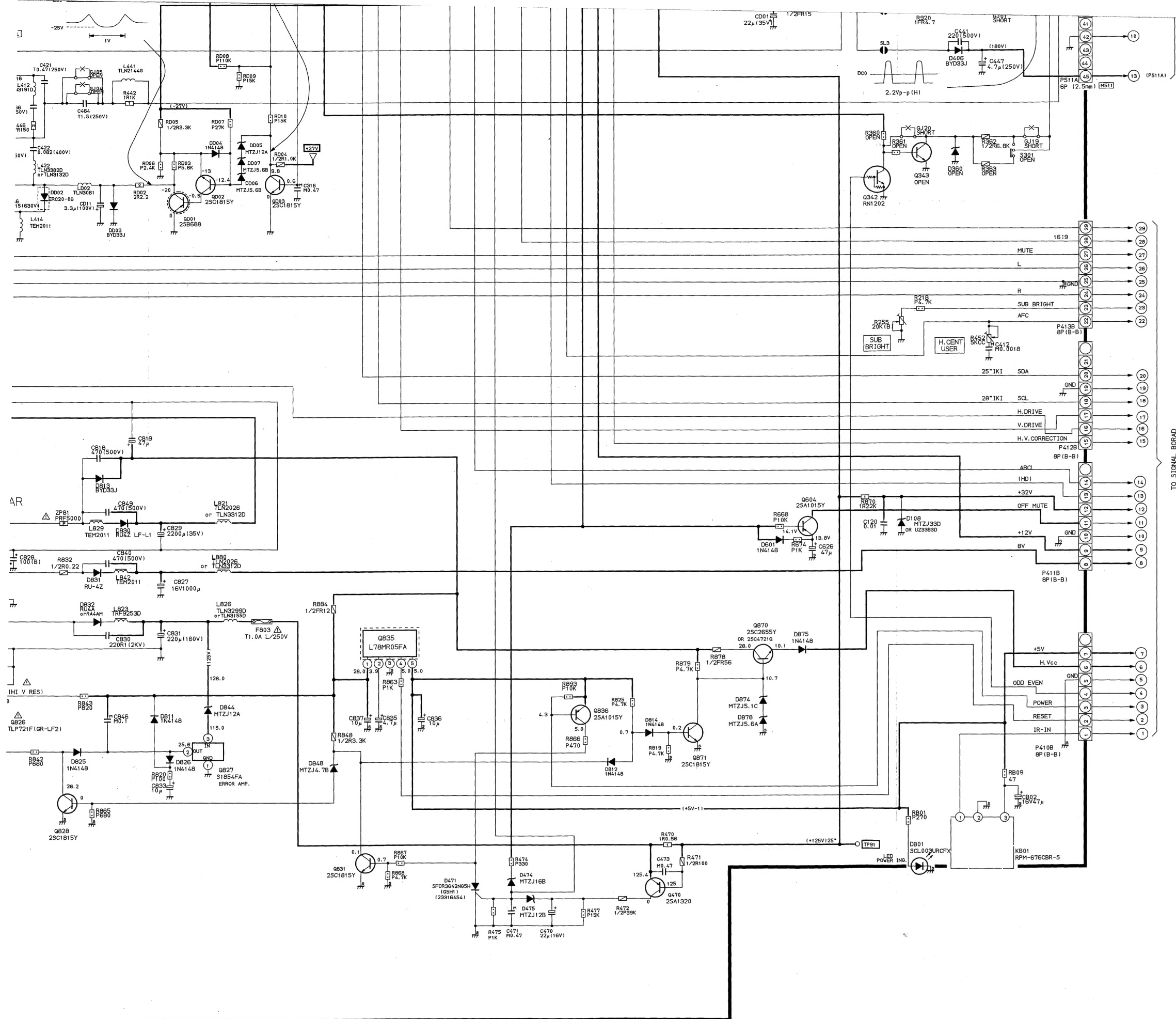


(2/2)









SPECIFICATIONS

Input Power Rating:	105 watts (2563DN), 110 watts (2863DN), AC 220-240 volts, 50 Hz	
Aerial Input Impedance:	75 ohm unbalanced type for UHF and VHF	
Receiving Channels:	CCIR (B/G, PAL) VHF 2~4, 5~12, S1~S20 UHF 21~69	
Intermediate Frequencies:	Picture I-F carrier frequency 38.9 MHz (B/G) Sound I-F carrier frequency 33.4 MHz (B/G)	
Picture Tube:	25 inches, A59ECF20X17 590 mm (diagonal of viewable area), 110° deflection : (2563DN) 28 inches, A66ECF20X17 660 mm (diagonal of viewable area), 110° deflection : (2863DN)	
Sound Output:	10.0 watts × 2	
Speakers:	120 mm × 60 mm oval 2 pcs (MAIN)	
Aux. Terminals:	21 pin socket VIDEO/AUDIO INPUT socket	
Dimensions:	Table type	(2563DN) (2863DN)
	Height	526 mm 568.5 mm
	Width	703 mm 760 mm
	Depth	464 mm 480 mm
Mass:	26.8 kg (2563DN), 33.5 kg (2863DN)	
Features:	Video input of PAL/3.58N/4.43N, TELETEXT reception, NICAM Digital stereo system, OFF-timer	

Specifications are subject to change without notice.